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## PERSONAL.

Mr. William H. Rogers, Water Commissioner of Middletown, N. Y., has resigned.

Mr. H. M. Knapp, Pittsburg, Pa., has been appointed Contracting Agent for the Pittsburg Bridge Co., in Kentucky, Southern Ohio and Indiana, with headquarters at Louisville, Ky.

Mr. Charles Roth has been appointed Secretary of the Water-Works Commission of Cincinnati, O., to succeed Mr. George W. Edwards, whose resignation was announced in our issue of Aug. 26.

Mr. Mason Rickett, Assistant Mechanical Engineer of the Cleveland, Cincinnati, Chicago & St. Louis Ry., has been appointed Master Mechanic, to succeed Mr. J. A. Keegan, with headquarters at Delaware, O.

Maj. Alexander M. Miller, Corps of Engineers, U. S. Army, has been ordered from Galveston, Tex., to New York city. He will be succeeded at Galveston by Lieut. Charles Riche, Corps of Engineers, U. S. A.

Mr. M. Greenwood, for nine years Superintendent of the Hall Steam Pump Co., Allegheny, Pa., has resigned to accept the position of Sales Agent in Pittsburg, Pa., of the Laidlaw-Dunn-Gordon Co., Cincinnati, O., with office in the Carnegie Building.

Mr. Joseph Herrin, General Superintendent of the Atlanta & West Point R. R. and Western Ry. of Alabama, with headquarters at Montgomery, Ala., has retired from the railway service to engage in lead mining in Missouri. He was formerly General Superintendent of the Iron Mountain R. R.

Mr. Wolcott C. Foster, of the firm of Foster & Foye, civil engineers, 11 Broadway, New York city, has been appointed Consulting Engineer to the township of Garfield, N. J., in the matter of the application of the Saddle River Traction Co. for a franchise to build an electric railway from Passaic to Lodi.

Mr. Nicholas Simin, Chief Engineer of the water-works of Moscow, Russia, is now visiting this country to study American water-works practice, especially water purification. He may be addressed while in America care of Mr. Allen Hazen, St. Paul Building, New York. Mr. Simin is accompanied by his daughter, who acts as his secretary and interpreter.

Mr. F. G. Frink, Instructor in Architecture in the Chicago Athenæum and in the Public Manual Training School, Chicago, Ill., has resigned to accept the position of Professor of Civil Engineering in the Idaho State University, Moscow, Ida., succeeding Prof. J. E. Ostrander, whose acceptance of the chair of Mathematic and Civil Engineering in the Massachusetts Agricultural College was announced in our issue of July 22. Mr. Frink graduated from the University of Michigan, Ann Arbor, Mich., in the class of 1886 and has since been engaged in engineering work in connection with several Chicago companies.

Mr. John S. Thurman has been appointed Mechanical Engineer of the Missouri Pacific Ry. and the St. Louis, Iron Mountain & Southern Ry., with offices at St. Louis, Mo. He will have charge of all standard specifications and drawings pertaining to this department, and will also inspect and test materials when necessary. It is announced by Mr. Frank Rearden, Superintendent of the Locomotive and Car Department, that changes in the present standard plans or specifications will not be made by subordinate officers, either in the repairs or construction of equipment or machinery, otherwise than upon standard plans and specifications furnished by the Mechanical Engineer, properly approved by the head of the Mechanical Department.

Mr. A. G. Menocal, C. E., U. S. N., and M. Am. Soc. C. E., has formally applied to the Secretary of the Navy, under the naval regulations, for the appointment of a court to inquire into the management of the repairs of the Brooklyn dry-dock when under his charge. Mr. Menocal feels that the transfer of this work to the Bureau of Construction and Repairs is a reflection upon his professional reputation, and he says that the delays complained of were due to the complicated methods of obtaining material prevailing in the Bureau of Yards and Docks. Had he been permitted to order materials without advertising, under the authority now granted to Naval Constructor Bowles, he claims that he would have made a very different record. This application to the Secretary has not yet been acted upon.

Maj. Moses P. Handy, whose appointment as United States Commissioner to the Paris Exposition of 1900 was announced in our issue of Aug. 5, has sailed for Paris to arrange for space for American exhibits. He is accompanied by Lieut. A. C. Baker, U. S. Navy, who was officially connected with the World's Columbian Exposition at Chicago in 1893, and Col. Charles Chaille-Long, formerly United States Consul at Alexandria, Consul-General at Corea. Maj. Handy will be gone about two months, and upon his return will make his report to the President before the opening of Congress. An office of the commission has been established in Chicago, in charge of Mr. J. J. McGibbon, who was Assistant Chief in the Liberal Arts Department and Secretary of the Committee of Awards of the Columbian Exposition.

Naval Constructor Philip Hichborn, Chief of the Bureau of Construction and Repairs since July 13, 1893, has been appointed by the President to succeed himself for another term of four years. Mr. Hichborn served his apprenticeship in naval construction in the Charlestown Navy Yard and then went to California by way of Cape Horn, and taking up his business became a master mechanic two years later. His ability was such that he was offered a position as Assistant Naval Constructor in 1862, which he declined. Seven years later, in June, 1869, the position was again offered and this time accepted. His service in connection with the building of the "new navy" has been arduous and has won for him high fame in his profession. Personally Mr. Hichborn is an unassuming, hard-working man, and his reappointment as Chief of the Bureau of Construction and Repairs meets with the hearty approval of all who know him.

## OBITUARY.

Mr. Timothy Stuart, of the firm of T. Stuart & Sons, contractors, of Boston, Mass., died in Newton, Sept. 8, aged 72.

Mr. Jacob Seabold, Deputy Commissioner of Street Improvements of New York city, died Sept. 12, aged 55.

Mr. A. S. Phillips, contractor, of Wilkes Barre, Pa., died Sept. 6, aged 63.

Hon. Thomas Thorn Flagler, President of the Holly Mfg. Co., of Lockport, N. Y., who died Sept. 5, as was announced in our last issue, was born at Pleasant Valley, N. Y., Oct. 12, 1811, and learned the printer's trade in Oxford, N. Y. In 1829 he became the publisher of the Chenango "Republican," and in 1838 of the Niagara "Courier." In 1842 and 1843 he was elected to the New York Legislature and was Treasurer of Niagara county in 1849. He was a member of the New York State Legislature from 1853 to 1857, and of the Constitutional Convention of 1867-8. He had resided in Lockport since 1836. He has been from the beginning a director of the Lockport Hydraulic Co., which has expended large sums of money in making the surplus canal water taken from the head of the locks available for water power. In 1859 he organized the Holly Manufacturing Co., with a capital of $20,000, of which he furnished half, and has ever since held the office of President. He also established the Lockport Gaslight Co. and was connected with the Lockport & Buffalo R. R., now owned by the Erie R. R. Without seeking it, Mr. Flagler has been called almost invariably to the presidency of the business organizations with which he has been connected, and for many years has stood at the head of eight such organizations. He recently gave to the city of Lockport a building for use as a hospital, which has been named the Flagler Hospital.

## ENGINEERING SOCIETIES.

### COMING TECHNICAL MEETINGS.

COMING TECHNICAL MEETINGS.

THE ENGINEERS' CLUB OF PHILADELPHIA.
Sept. 18. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' CLUB OF MINNEAPOLIS.
Sept. 20. Secy., Elbert Nexsen, 1620 S.E. 4th St., Minneapolis, Minn.

TECHNICAL CLUB OF OMAHA.
Sept. 20. Secy., J. Harry Lawrie, Omaha, Neb.

WESTERN RAILWAY CLUB.
Sept. 21. Secy., W. D. Crossman, The Rookery, Chicago, Ill.

ENGINEERING SOCIETY OF WEST'N PENNSYLVANIA
Sept. 21. Secy., R. A. Fessenden, 410 Penn. Ave., Pittsburg, Pa.

AMERICAN SOCIETY OF RAILROAD SUPERINTENDENTS.
Sept. 22. Annual meeting, at Nashville, Tenn. Secy., C. A. Hammond, Asbury Park, N. J.

AMERICAN FORESTRY ASSOCIATION.
Sept. 22. Annual meeting, at Nashville, Tenn. Secy., F. H. Newell, Washington, D. C.

ENGINEERING ASSOCIATION OF THE SOUTH.
Sept. 23. Secy., L. P. Brown, Nashville, Tenn.

INDIANAPOLIS ENGINEERING CLUB.
Sept. 25. Secy., Edson F. Folsom, Indianapolis, Ind.

NATIONAL IRRIGATION CONGRESS.
Sept. 28, 29 and 30. Annual meeting, at Lincoln, Neb. Secy., C. M. Heintz, Los Angeles, Cal.

AMERICAN INSTITUTE OF ARCHITECTS.
Sept. 28-30. Detroit, Mich. Secy., Alfred Stone, Providence, R. I.

NATIONAL STREET LIGHTING ASSOCIATION.
Sept. 28. Columbus, O. Secy., Henry Hopkins, Box 912, New Haven, Conn.

WISCONSIN POLYTECHNIC SOCIETY.
Sept. 28. Secy., W. K. Means, Loan & Trust Bldg., Milwaukee, Wis.

CIVIL ENGINEERS' CLUB SOCIETY OF ST. PAUL.
Oct. 4. Secy., C. L. Annan, City Engineer's Office, St. Paul, Minn.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENTS.
Oct. 5. Nashville, Tenn. Secy., David L. Fulton, Allegheny, Pa.

ENGINEERS' CLUB OF ST. LOUIS.
Oct. 6. Secy., Richard McCulloch, St. Louis, Mo.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Oct. 6. Secy., C. W. Hunt, 127 E. 23d St., New York City.

BROOKLYN ENGINEERS' CLUB.
Oct. 7. Secy., A. J. Provost, 191 Montague St., Brooklyn, N. Y.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Oct. 14. Montreal, Ont. Secy., C. H. McLeod, 112 Mansfield St., Montreal, Ont.

WETSERN FOUNDRYMEN'S ASSOCIATION.
Oct. 18-20. Autumn meeting, Cincinnati, O. Secy., A. Sorge, Jr., 1020 Monadnock Block, Chicago, Ill.

ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 19. Annual convention, at the Brown Palace Hotel, Denver, Colo. Secy., S. F. Patterson, B. & M. R. R., Concord, N. H.

AMERICAN STREET RAILWAY ASSOCIATION.
Oct. 19, 22. Annual convention at Niagara Falls, N. Y. Secy., T. C. Penington, Chicago.

THE ENGINEERS' CLUB OF PHILADELPHIA.—This club will hold its next meeting Sept. 18 at its house, No. 1122 Girard St., Philadelphia, at which time a paper will be read by Prof. J. M. Porter on the Delaware River Bridge at Easton, Pa.

WESTERN FOUNDRYMEN'S ASSOCIATION.—The autumn meeting will be held in Cincinnati, O., beginning Oct. 18, 1897, and will last two or three days. It is proposed to make this an interesting meeting by the reading and discussion of important papers, by visits to establishments of national reputation in and near Cincinnati, and by bringing the foundrymen together for several days in social intercourse. A. Sorge, Jr., Secy.

PENNSYLVANIA STREET RAILWAY ASSOCIATION.—This association held a meeting, Sept. 1-2, at Allentown, Pa. About 100 members and visitors were present. As a result of the election the following officers were chosen for the ensuing year: Pres., R. E. Wright, Allentown, Pa.; First Vice-Pres., Frank Silliman, Scranton, Pa.; Second Vice-Pres., Dallas Sanders, Philadelphia, Pa.; Secy., S. P. Light, Lebanon, Pa. It was decided to hold the next convention at Scranton.

THE FOUNDRYMEN'S ASSOCIATION.—A meeting of this association was held Sept. 1, at the Manufacturers' Club, Philadelphia, Pa. An address by Pres. P. D. Wanner, Reading, Pa., opened the proceedings. His address was somewhat general in its nature, dealing with the business condition at present and future prospects. The Executive Committee through its secretary, Howard Evans, reported a series of letters bearing upon the condition of the foundry trade. Following this a paper on "Casting Street Girder Joints Together" was read by Mr. I. R. Newkirk.

FRANKLIN INSTITUTE.—The September 15th meeting of the Institute, held at its hall in Philadelphia, was according to the notice bulletin devoted to "Improved Furnaces and Automatic Stokers."

As a supplement to, and in conclusion of, the extended discussion of the subject of the "Smoke Nuisance" with especial reference to Philadelphia, which took place at the stated meetings of April and May, the Committee on Meetings has extended an invitation to manufacturers and inventors of improved furnaces and automatic stoking devices to present a brief description of the construction and operation of their respective devices, and a statement of claims for efficiency. The number of acceptances received includes the greater number of the best-known devices of this class, and the communications and the discussion thereof promise to be interesting and important. The following is a list of those who signify their intention to participate, viz.: Murphy Iron Works, Detroit, Mich., manufacturers of the Murphy automatic smokeless furnace; McKenzie Furnace Co., Chicago, Ill., manufacturers of smokeless furnaces; American Stoker Co., Dayton, O., manufacturers of the American stoker; William Sellers & Co., Inc., Philadelphia, manufacturers of the Vickers automatic stoker; Westinghouse, Church, Kerr & Co., New York, manufacturers of the Roney mechanical stoker; The Hutchinson furnace will be described by Mr. C. Wolesley Cox; The Hawley Down-Draught Furnace Co., Pittsburg, Pa., manufacturers of the Hawley down-draft furnace; The Wilkinson Manufacturing Co., Philadelphia, manufacturers of the Wilkinson stoker. The Babcock & Wilcox Co., and the Coxe Iron Manufacturing Co., of New York, and others, will probably also be represented.

The Board of Managers lately decided that it would be prudent to convert a portion of the building into a fireproof structure, in which the valuable library of the Institute could be placed, and made as safe against destruction by fire as practicable, so long as the Institute should be compelled to occupy its present quarters. The change, when completed, in a few months, will likewise provide a much larger space for the reading-room and for the display of models and apparatus, and for general museum purposes. While the alterations are in progress, it will be necessary to keep the library closed in the evenings, but this will be for as short a time as possible.

## CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

| Bids to be opened. | Work. | Place. | See Eng. News. |
|---|---|---|---|
| Sept. 16. | Well. | Fairmont, Minn. | Sept. 9. |
| Sept. 16. | Macadamizing. | Old Saybrook, Conn. | Sept. 9 |
| Sept. 16. | Brick paving, etc. | Spokane Wash. | Sept. 9 |
| Sept. 16. | Electric light plant. | Ironton, O. | Sept. 2 |
| | Advertised, Engineering News, Sept. 2. | | |
| Sept. 16. | Electric street lighting. | Ironton, O. | Sept. 2 |
| | Advertised, Engineering News, Sept. 2. | | |

Sept. 16. Concrete floor (9,100 sq. ft.), Chicago, Ill. Sept. 2
Sept. 16. Heat'g and ventilat'g, New London, Conn. Sept. 2
Sept. 16. Sewer, Cleveland, O. ..... Aug. 26
Sept. 16. Bridge, New York, N. Y. ..... Aug. 19
Sept. 17. Money vault, Boston, Mass. ..... Aug. 26
Advertised, Eng. News, Aug. 26 and Sept. 2.
Sept. 17. Sewer, Cleveland, O. ..... Aug. 26
Sept. 17. Macadamizing, etc., Marion, O. ..... Sept. 2
Sept. 17. Recreation building, New York, N. Y. .. Sept. 9
Sept. 17. Piers (2), New York, N. Y. ..... Sept. 9
Sept. 17. Macadamizing, Boston, Mass. ..... Sept. 9
Sept. 17. Building work, Chattanooga, Tenn. ..... Sept. 16
Sept. 17. Channel, Buffalo, N. Y. ..... Sept. 16
Sept. 17. Sewers, Detroit, Mich. ..... Sept. 16
Sept. 18. Macadamizing, etc., Sewickley, Pa. ..... Sept. 16
Sept. 18. Macadamizing, Bristol, Conn. ..... Sept. 16
Sept. 18. Paving, etc., Corapolis, Pa. ..... Sept. 16
Sept. 18. Sidewalks, Findlay, O. ..... Sept. 16
Sept. 18. Exposition buildings, Omaha, Neb. ..... Sept. 16
Sept. 18. Water pipe (12 miles), N. Britain, Conn. Sept. 9
Advertised, Eng. News, Sept. 9 and 16.
Sept. 18. Pipe sewers (4,000 ft.), Assiniboula, O. .... Sept. 9
Advertised, Engineering News, Sept. 9.
Sept. 18. Ditch work, Bellefontaine, O. ..... Sept. 2
Advertised, Eng. News, Sept. 2 and 9.
Sept. 18. Hospital buildings, Danville, Ill. ..... Sept. 2
Sept. 19. Stone abutments (2), East Helena, Mont. Sept. 16
Sept. 20. Brick paving, Shenandoah, Pa. ..... Sept. 16
Sept. 20. Paving, etc., Toledo, O. ..... Sept. 16
Sept. 20. Water supply, San Francisco, Cal. ..... July 29
Sept. 20. Guard lock on Soulanges Canal, Ont. ... Sept. 16
Sept. 20. Iron sewer pipe, Stamford, Conn. ..... Sept. 16
Sept. 20. Street work, Middletown, R. I. ..... Sept. 16
Sept. 20. Paving, Baltimore, Md. ..... Sept. 16
Sept. 20. Clay road, Leesburg, Fla. ..... Sept. 16
Sept. 20. Sewers, Bridgeport, Conn. ..... Sept. 16
Sept. 20. Pipe sewers, Sewickley, Pa. ..... Sept. 16
Sept. 20. Hospital building, Winnemucca, Nev. ..... July 22
Sept. 20. Sewers, Evanston, O. ..... Aug. 26
Sept. 20. Heating plants, Fort Logan, Colo. ..... Sept. 2
Sept. 20. Municipal building work, Toronto, Ont. ... Aug. 26
Advertised, Engineering News, Aug. 26.
Sept. 20. Pipe sewers (1,250 ft.), Roanoke, Va. ... Sept. 9
Sept. 20. Paving, Brooklyn, N. Y. ..... Sept. 9
Sept. 20. Boilers, wiring, etc., Kings Park, L. I. .. Sept. 9
Sept. 20. Pumping station, Cincinnati, O. ..... Sept. 9
Sept. 20. Asphalt paving, etc., New York, N. Y. .. Sept. 9
Sept. 21. Cement sidewalk, Pleasant Ridge, O. .... Sept. 9
Sept. 21. Brick sewer (24×36 ft.), Peru, Ind. .... Sept. 9
Sept. 21. Light tower, North Manitou, Mich. ..... Sept. 9
Advertised, Eng. News, Sept. 9 and 16.
Sept. 21. Repairing wharf, Willets Point, N. Y. H. Sept. 9
Advertised, Eng. News, Sept. 9 and 16.
Sept. 21. Water supplies, etc., St. Louis, Mo. ..... Sept. 16
Sept. 21. Paving, Hagerstown, Md. ..... Sept. 16
Sept. 21. Laying water pipe, etc., St. Louis, Mo. .. Sept. 16
Sept. 21. Brick paving, etc., Crafton, Pa. ..... Sept. 16
Sept. 21. Removing building, Brooklyn, N. Y. .... Sept. 16
Sept. 21. Asphalt paving, Brooklyn, N. Y. ..... Sept. 16
Sept. 21. Grading, flagging, etc., New York, N. Y. Sept. 16
Sept. 21. Paving, Baltimore, Md. ..... Sept. 16
Sept. 21. Sewers (3,100 ft.), Crafton, Pa ..... Sept. 16
Sept. 22. Building repairs, Buffalo, N. Y. ..... Sept. 16
Sept. 22. Street work, Elmwood Place, O. ..... Sept. 16
Sept. 22. Brick paving etc., Mason City, Ia. ..... Sept. 16
Advertised, Engineering News, Sept. 16.
Sept. 22. Paving, Hoboken, N. J. ..... Sept. 9
Sept. 22. Brick paving (2,030 sq.yds.), Corry, Pa. . Sept. 9
Sept. 22. Wharf and boathouse, Ft. Barrancas, Fla. Sept. 9
Advertised, Eng. News, Sept. 2 to 16.
Sept. 22. Funding bonds, Waterbury, Conn. ..... Sept. 9
Sept. 22. Supplies for Fort Pickens, Fla. ..... Aug. 26
Advertised, Eng. News, Aug. 26 to Sept. 16.
Sept. 22. Electric light plant, Fort Pickens, Fla. .. Aug. 26
Advertised, Eng. News, Aug. 26 to Sept. 16.
Sept. 22. Anchorages, East River bridge, New York. Sept. 2
Advertised, Eng. News, Sept. 2 and 9.
Sept. 23. Street lighting, Montgomery, Ala. ..... Aug. 26
Sept. 23. Buildings, Fort Hamilton, N. Y. H. .... Aug. 26
Advertised, Eng. News, Aug. 26 to Sept. 16.
Sept. 23. Illinois & Miss. Canal (8 miles), Chicago. Aug. 26
Advertised, Eng. News, Aug. 26 to Sept. 16.
Sept. 23. Water-works, Soldiers' Grove, Wis. ..... Sept. 9
Advertised, Eng. News, Sept. 9 and 16.
Sept. 23. Heating and ventilating, Lynn, Mass. .. Sept. 9
Sept. 23. Reconstructing bridges, Brainerd, Minn. . Sept. 9
Advertised, Eng. News, Sept. 9 and 16.
Sept. 24. Building at Jefferson Barracks, Mo. ..... Aug. 26
Advertised, Eng. News, Aug. 26 to Sept. 16.
Sept. 24. Trunk sewer, Cincinnati, O. ..... Sept. 2
Sept. 24. School building, Darlington, Wis. ..... Sept. 16
Sept. 24. Grading, etc., East Windsor, Conn. ..... Sept. 16
Sept. 24. Heating plant, Columbia Falls, Mont. .... Sept. 16
Sept. 24. Paving, Camden, N. J. ..... Sept. 16
Sept. 24. Macadamizing, New Brunswick, N. J. .... Sept. 16
Sept. 24. Paving, etc., St. Louis, Mo. ..... Sept. 16
Sept. 25. Grading, etc., Lakewood, O. ..... Sept. 16
Sept. 25. Bonds ($190,000), E. Cambridge, Mass. .. Sept. 16
Sept. 25. Dredging in Va., Washington, D. C. ..... Aug. 26
Advertised, Eng. News, Aug. 26 to Sept. 16.
Sept. 25. Closing crevasse, New Orleans, La. ..... Sept. 2
Sept. 25. Sewers (1½ miles), New Rochelle, N. Y. .. Sept. 9
Sept. 26. Mess hall, Willets Point, N. Y. ..... Aug. 26
Advertised, Eng. News, Aug. 26 to Sept. 16.
Sept. 26. Court house plans, Worcester, Mass. .... Aug. 5
Sept. 27. Water main (13 miles), Harrisonburg, Va. Sept. 9
Sept. 27. Paving, etc., Toledo, O. ..... Sept. 9
Sept. 27. Pipe sewer, Wabash, Ind. ..... Sept. 9
Sept. 27. Bridge, Roanoke, Va. ..... Sept. 9
Sept. 27. Water pipe, hydrants, etc., Hoboken, N. J. Sept. 9
Sept. 27. Building work, New York, N. Y. ..... Sept. 16
Sept. 27. Macadamizing, Lodi, N. J. ..... Sept. 16
Advertised, Engineering News, Sept. 16.
Sept. 27. Water tank, Fort Robinson, Neb. ..... Sept. 16
Sept. 27. Macadamizing, Mount Vernon, N. Y. .... Sept. 16
Sept. 27. Steel highway bridge, Roanoke, Va. .... Sept. 16
Sept. 28. Water bonds, New Britain, Conn. ..... Sept. 16
Sept. 29. Cleaning sewer, Hoboken, N. J. ..... Sept. 9
Sept. 30. High school building, Milwaukee, Wis. .. Sept. 9
Sept. 30. Pipe sewers, Lake Forrest, Ill. ..... Sept. 16
Advertised, Engineering News, Sept. 16.
Sept. 30. Iron pipe sewer, Lake Forrest, Ill. ..... Sept. 16
Advertised, Engineering News, Sept. 16.
Sept. 30. School building, Milwaukee, Wis. ..... Sept. 16
Sept. 30. Iron bridge, Algona, Ia. ..... Sept. 16
Oct. 1. Water bonds ($7,000), Wurtsboro, N. Y. .. Sept. 16
Oct. 1. Water-works, Senatobia, Miss. ..... Sept. 16
Advertised, Engineering News, Sept. 16.
Oct. 1. Main sewer (3,000 ft.), Cleveland, O. ..... Sept. 9
Advertised, Eng. News, Sept. 9 and 16.
Oct. 1. Electric light plant, Herve, Belgium. .... July 8
Oct. 2. Iron bridge, Cincinnati, O. ..... Sept. 9
Oct. 2. Road work, Cincinnati, O. ..... Sept. 9
Oct. 2. Removing wreck in Urbanna Creek, Va. .. Sept. 16
Oct. 2. Sewer, Fort Washington, Md. ..... Sept. 16
Advertised, Eng. News, Sept. 16 to 30.
Oct. 4. Pipe sewers (3 Sts.), Chillicothe, O. ..... Sept. 16
Oct. 4. Brick paving, Findlay, O. ..... Sept. 9
Oct. 4. Sewers, Cincinnati, O. ..... Sept. 9
Oct. 4. Sewers, Chillicothe, O. ..... Sept. 9
Oct. 6. Dredging in the San Joaquin River, Cal. . Sept. 16
Oct. 6. Water tank, Fort Keogh, Mont. ..... Sept. 16
Oct. 7. Pumping engine, Ogdensburg, N. Y. ..... Sept. 16
Oct. 7. Tubular steam boilers, Ogdensburg, N. Y. . Sept. 16
Oct. 7. Monument, St. Joseph, Mich. ..... Sept. 16
Oct. 7. Stables, Burlington, Vt. ..... Sept. 16
Oct. 7. Brick paving (2,857 sq.yds.), Warren, O. .. Sept. 16
Oct. 7. Pumping engines (2), Hull, England. ..... Sept. 9
Oct. 7. Improving Mermantan River, La. ..... Sept. 9
Oct. 12. Sewer bonds ($222,000), Cleveland, O. .... Sept. 16
Oct. 14. Replating hull of snag boat, Cincinnati, O. . Aug. 26
Oct. 13. Stone retaining wall, New York, N. Y. .... Sept. 16
Advertised, Eng. News, Sept. 16 to Oct. 2.
Oct. 18. Scow and boat, Sabine Pass, Tex. ..... Aug. 26
Oct. 20. Water well (8-in.), Richmond, Va. ..... Sept. 16
Oct. 30. Plans for sewer system, Uxbridge, Eng. .. Sept. 16
Nov. 3. Bridge substructures (2), Chicago Ill. .... Sept. 9
Nov. 3. Bridge superstructures (2), Chicago, Ill. . Sept. 9
Nov. 5. Electrical equipment, Hull, England. ... Sept. 16
Nov. 10. Tail race and dam, Chicago, Ill. ..... Sept. 16
Advertised, Eng. News, July 22 to Aug. 12.
Nov. 18. Water-works (purchase of), Para, Brazil. . Aug. 12
Nov. —. Plans for public building, Mexico, Mex. .. May 6
Dec. 4. Plans for town hall, Cardiff, Wales. ..... Sept. 16
No date. Hearing on extendg pier lines, Brooklyn. Sept. 16
Advertised, Eng. News, Sept. 16 and 23.
No date. Water-works supplies, Summit, Miss. .... Sept. 16
No date. Pumping engine, Paducah, Ky. ..... Sept. 16
Advertised, Engineering News, Sept. 16.

## RAILWAYS.

ALASKA.—Press reports from Washington state that W. A. Pratt, the engineer sent to Alaska by the Yukon Mining, Trading & Transportation Co., of Wilmington, Del., to prospect for a railway into the Yukon country, returned to Seattle Sept. 11, from Juneau, and started for the East. Preliminary surveys for the line will probably be made soon. The proposed railway is 162 miles in length, running from the head of Taku Inlet to Lake Teslin, at the head of Hootalinqua River, which is one of the principal navigable tributaries of the Yukon. The heaviest grade is 3%, and the route is quite direct. The company has secured concessions from the Canadian government of 5,200 acres of land for each mile of road built.

ALASKA CENTRAL.—This railway company is being organized in San Francisco, Cal., to have a capital stock of $5,000,000. It is proposed to construct a railway from Prince William Sound, up the valley of the Copper River, thence across the divide to a point on the Yukon River, a distance of about 322 miles. John Underwood is interested.

ARIZONA.—Press reports state that United States Attorney Ellenwood has filed, in the office of the Territorial Secretary, notice of intention to construct a railway from Phoenix through Lampe and Mesa to Globe, Ariz., a distance of 100 miles, with a branch line from Queenawas, 15 miles, to Florence. The notice is filed in the interest of the Santa Fe Ry., and the preliminary survey has been made.

ASTORIA & COLUMBIA RIVER.—T. H. Curtis, Ch. Engr., Astoria, Ore., informs us that the surveys for extensions to this railway have been made and the right of way secured. Corey Bros. Co., of Ogden, Utah, have been awarded the contract for 10 miles of grading, between Astoria and Knappa, Ore., work completed; Honeyman, De Hart & Glenn, Rainier and Portland, Ore., for about 47 miles of grading between Knappa and Goble, about three-quarters completed; Robert Wakefield, of Portland, is the principal bridge contractor. It is expected to finish tracklaying by Dec. 1. When completed the line will extend from Seaside to Goble, Ore., via Gearhart, Warren, Astoria, Knappa, Clifton, Westfort, Marshland, Clatskanie, Beaver, Mayger, and Rainier, a distance of about 78 miles. At present there is a line operating between Astoria and Seaside and Flavil. Pres., A. B. Hammond, Missoula, Mont.

BAYFIELD HARBOR & GREAT WESTERN.—E. C. Hollidge, Ch. Engr. Bayfield Transfer Ry. Co., Bayfield, Wis., writes us that Jas. W. Gorman, of Minneapolis, Minn., has been awarded the contract for constructing six miles of this projected railway, track to be laid by Dec. 1. After this is completed it is expected to complete the connection with the Northern Pacific and the Duluth, South Shore & Atlantic Ry. at Iron River, Wis., by this time next year, having already made connection here with the Chicago, St. Paul, Minneapolis & Omaha Ry.

BRAZIL.—Press reports from London, England, state that an Anglo-German syndicate, including the Rothschilds, has offered the Brazilian government £5,000,000 for the Central Railroad of Brazil. Antonio Fontura Xavier, Consul-General at New York.

BRAINERD & NORTHERN MINNESOTA.—Reports state that surveys are being made for an extension of this railway to Graceland, Minn.; construction will begin soon. E. H. Hoar, Gen. Mgr., Brainerd, Minn.

CENTRAL OF ST. JOSEPH.—The council of St. Joseph, Mo., has passed an ordinance extending the franchise of this company for one year. The proposed railway will extend from Pattonsburg, Mo., to St. Joseph; thence it is proposed to build a line to Smithville, to connect with the Quincy, Omaha & Kansas City, which would make a through line from Omaha via St. Joseph and Kansas City to Port Arthur and the coast.

DELAWARE RIVER & LANCASTER.—This railway was sold by A. P. Wintersteen, Sept. 14, to Charles L. Kingley, of New York, for $6,500. Reports state that it is his intention to complete the line from Point Pleasant to Lancaster, Pa., a distance of 80 miles, of which but 12 miles are finished.

DULUTH GREAT WESTERN.—Press reports state that this company, incorporated May 16, 1896, will commence active operations towards constructing a railway from Duluth, Minn., southwest across the St. Louis River, through part of northeastern Wisconsin, re-entering Minnesota and thence west, passing the White Earth Indian Reservation and Caledonia; with a branch line from Leech Lake reservation to Moorhead. The company is capitalized for $100,000, and incorporators and first directors are: Pres., Geo. E. Mansfield, Boston, Mass.; Vice-Pres., Caleb S. Cox, Hubbard, Minn.; Treas., Isaiah H. Bradford, Hubbard; Secy. and Gen. Counsel John A. Keyes; and Edward H. Spalding, of Duluth, Minn.

ERIE.—This company has begun the preliminary work preparatory to elevating its tracks in Jersey City, N. J., as required by the contract made with the city April 28 for the elimination of certain crossings at grade in the city. The rearranging of the local freight yards and other necessary work has also commenced. The plans provide for bridges at Monmouth, Coles, Erie, Grove and Henderson Sts., and Jersey Ave., with a clearance of at least 12 ft.; there will also be depressions, for which the city will pay, at sundry streets. Estimated cost of improvement, $1,000,000. C. W. Buchholtz, Ch. Engr., New York, N. Y.

GALVESTON, BRAZOS & SOUTHWESTERN.—Reports state that this projected railway will be 250 miles long, running from Galveston to San Antonio, Tex., via Angleton, Brazoria and Bay City. Grading is in progress from Galveston to Angleton, 30 miles, and contracts will soon be let for the second section. There will be several Howe truss bridges on the line, the contracts for which will be let this fall. The entire line has been surveyed from Galveston to San Antonio. L. P. Featherstone, Pres.; L. E. Beadle, Ch. Engr., Galveston, Tex.

GREENFIELD & MAXWELL.—This railway company is being organized at Greenfield, Ind., for the construction of a line 6 miles long, with the northern terminus connecting with the Cleveland, Cincinnati, Chicago & St. Louis Ry. at Maxwell, and the southern terminus with the Pennsylvania system; capital stock, $50,000. J. H. Moulden, of Greenfield, is interested.

JAPAN.—Press reports state that the Japan Railway Co. is about to double track one of its lines, which is 140 miles long, and during the next five years to increase the rolling stock by 300 locomotives, 1,000 passenger cars, and 3,000 trucks, at a cost of about $13,750,000. G. A. L. Wadell, of Kansas City, Mo., has secured from this company a contract for seven cantilever bridges, to be built across the Agno River, in Central Japan.

KICKAPOO VALLEY & NORTHERN.—W. H. Thomson, Ch. Engr., Wauzeka, Wis., informs us that tracklaying for this railway, running from Wauzeka to La Farge, Wis., has been completed and trains will commence to run into La Farge on Oct. 1. In 1891, 34 miles of the line was constructed as far as Soldiers' Grove; in 1896 it was extended 5 miles to Readstown, and the extension to La Farge, 12 miles farther, was just completed. The road was built under a receivership. Pres., Chas. P. Cogswell, Norwich, Conn.

LOUISIANA & NORTHWESTERN.—Press reports state that this company filed articles of incorporation Aug. 21 in Arkansas; capital stock, $3,000,000. It is proposed to construct a railway extension from Bienville, La., northerly to a point on the Arkansas state line.

LOS ANGELES & PASADENA INTER-URBAN.—This company was incorporated in California Aug. 28, with a capital stock of $600,000, for the construction of a new rapid transit line between these two cities, which are about 8 miles apart. Among the directors are: Jesse M. Thompson and Samuel P. Anderson, of Chicago; Jose G. Estudillo, Bradner W. Lee and Walter S. Maxwell, of Pasadena, Cal.

MADISON.—This company was incorporated Sept. 11 in Illinois for the construction of a railway from Venice to Collinsville, Madison county, Ill. The principal office will be at Collinsville. The incorporators and the first board of directors are: G. A. Wilson, John S. P. Gordon, Charles Ray Dean and W. H. Hately, of Collinsville; and William B. Dean, of St. Louis, Mo.

NASHVILLE & KNOXVILLE.—It is reported that A. J. Crawford, Pres., has submitted a proposition to the citizens of Nashville, Tenn., to extend this road from Lebanon west to Nashville, and from Monterey, Tenn., east to the Cincinnati Southern, about 75 miles, provided they raise a subscription of $300,000 to the capital stock of the company. The proposition will probably be submitted to the voters at the general election in October.

OHIO RIVER & CHARLESTON.—It is announced that this line will be extended north to the Minneapolis, Va., coal fields, and south to Charleston, requiring extensions from Camden, S. C., to Charleston, and from Marion, N. C., to Minneapolis. Pres., Samuel Hunt, Carlisle Bldg., Cincinnati, O.

OHIO RIVER, FRANKFORT & WESTERN.—Preliminary surveys are now being made for the new line of this railway company, incorporated in August. The projected road will run from Dover, Ky., southerly to Germantown, Mount Olivet, Cynthiana, and Stanford, about 120 miles distant. It is reported that the name of the company will soon be changed to the Dover, Kentucky & South Atlantic. Pres., William Kenkley; Secy. and Gen. Mgr., Albert E. Boone, Zanesville, O.

ORANGE, CALL & PINE BELT.—This company was incorporated in Texas, Sept. 7, with a capital stock of $200,000. It is proposed to build, maintain and operate a railway from Salem, on the Sabine River, to Orange, Orange county, via Call, with a branch from Call to Jasper, a total distance of 70 miles. The incorporators are: Dennis G. Adams, Geo. W. Smith, C. S. Haggarty, C. B. Shepard, F. R. Syler, John Jay Culley, A. H. Mers, J. Trotti and William Halladay. The principal office will be at Call, Tex.

PITTSBURG, JOHNSTOWN, EBENSBURG & EASTERN.—This company was chartered in Pennsylvania, Sept. 14, with a capital stock of $1,500,000, to construct a railway 60 miles long, connecting at Johnstown with the Baltimore & Ohio R. R., thence running east to Ebensburg and Philipsburg, connecting with the Beech Creek R. R. The incorporators are: Samuel P. Langdon, G. T. Simonton, S. B. McDowell, Joseph A. Baker, R. S. Reed, Lewis G. Dutton, C. F. Camp, M. W. Enyeard and John H. Shrite, all of Philadelphia.

QUAKERTOWN & EASTERN.—Reports state that this line has been completed from Quakertown to Richlandtown, Pa., 2½ miles distant, and that it is being extended from the latter place to Riegelsville, via Springtown and Durham.

RICHMOND, PETERSBURG & CAROLINA.—We are informed that J. S. Nugley, Gen. Mgr., 136 Liberty St., New York, N. Y., will let the contract for the construction of this railway some time this month.

SAN FRANCISCO & SAN JOAQUIN VALLEY.—Press reports state that W. C. Edes, Asst. Ch. Engr., of this railway, is preparing to begin the preliminary survey on the line of the valley road between Stockton and San Francisco. W. B. Storey, Jr., Ch. Engr., San Francisco, Cal.

SOUTH AUSTRALIA.—The Commissioner of Railways of South Australia, in his report upon the feasibility of a direct railway line from Adelaide to Coolgardie, just presented to Parliament, makes the following statement: There are 353 miles to be constructed to reach the boundary, at a cost of £1,903,000 ($9,515,000), the works being estimated to cost £416,454, the permanent way £679,770, the provision of water £292,000, and rolling stock £80,000, the balance being appropriated in land, surveys, buildings, machinery, general expenses, maintenance for one year, and interest during construction. Provision is made for water conservation, rolling stock, station buildings, and all the machinery necessary for a well-equipped railway.

SOUTHEASTERN.—F. Gardner, Ch. Engr., Atlantic Coast Line, Wilmington, N. C., informs us that the location for this projected railway has just been completed and the right of way secured. The contract has been let to N. G. Wade, and the work will commence about Oct. 1.

SOUTHWESTERN ALABAMA.—Reports state that W. F. Vandiver, Montgomery, Ala., has been awarded the contract for constructing a part of this line, which will run from a town on the Alabama Midland to Elba, Ala., 35 miles distant; work to be completed Jan. 31, 1898. Pres., S. G. M. Sendon, Thomasville, Ga.; Ch. Engr., Major B. Dunham.

TENNESSEE NORTHERN.—J. K. Sroufe, Ch. Engr., La Follette, Tenn., informs us that track-laying for this line has been completed from La Follette Junction to La Follette, a distance of 12 miles; 70-lb. steel rails are being used. The road will be opened for traffic on Sept. 18. A. A. Glasier, Boston, Mass.

TEXAS, ARKANSAS & LOUISIANA.—This company has been incorporated in Texas with a capital stock of $100,000, to build a railway in Cass county, Tex., from Atlanta, on the Texas & Pacific Ry., to Bloomburg, on the Kansas City, Pittsburg & Gulf R. R., a distance of 18 miles. The road was completed for a distance of 8 miles and opened for traffic Sept. 1.

TUSCARORA VALLEY.—Reports state that a survey is being made for an extension of this road from Blair's Mills, Pa., southwest about 50 miles through Huntingdon and Fulton counties, to Hancock, Md., on the Baltimore & Ohio. The present line runs from Port Royal, Pa., southwest 27 miles to Blair's Mills. J. W. Woolfolk, Gen. Mgr., 15 Wall St., New York, N. Y.

WASHINGTON, ST. MARY'S BAY & POINT LOOKOUT.—This company has been incorporated in Maryland, with a capital stock of $1,250,000, to construct a railway from Washington to Point Lookout, St. Mary's county, Md., at the junction of the Potomac River and Chesapeake Bay, a distance of about 85 miles. The officers are: Col. A. B. Linderman, Pres., Philadelphia, Pa.; J. W. Bancroft, Vice-Pres.; H. L. Montgomery, Secy. and Treas.; Senator Charles L. Brown, Gen. Solicitor.

WEST SIDE BELT LINE.—James D. Callery, Pres., Pittsburg, Pa., writes us that the organization of this company has just been completed, and that the Little Saw Mill R. R. Co. has been absorbed by the new company. The surveys have been completed and most of the right of way secured. The projected line is 12 miles long, passing through Shannon and Carry, Pa. J. H. McRoberts, Ch. Engr., Pittsburg.

YUKON.—This company was incorporated in New Jersey, Sept. 10, with a capital stock of $600,000, of which $1,000 is paid in. It is proposed to construct, equip and operate a railway from Skaguay, Alaska, through White Pass in the Chilkoot Mountains, to the head of Lake Bennett. The incorporators are: Frederick C. Farnham, Seattle, Wash.; James McNaught and Jas. P. McGovern, New York, N. Y.

## STREET AND ELECTRIC RAILWAYS.

MACHIAS, ME.—An electric railway, 28 miles long, is projected from Lubec to this place, through Frescott, Whiting and East Machias.

SANFORD, ME.—Percy H. Richardson, civil engineer, has completed the preliminary survey for the Mousan River R. R., which will run from this place through Kennebunk to Cape Porpoise, 20 miles. A power dam, 16 ft. high, will be built at Old Falls, midway between Kennebunk and this place.

SKOWHEGAN, ME.—The new management of the Skowhegan & Norridgewock Electric R. R., mentioned in our last issue, has decided to extend the line five miles, at a cost of $25,000 and make a summer resort of North Pond. The lumber for the pleasure pavilion between the two towns has been procured. R. W. Brown may be addressed.

HOLYOKE, MASS.—The Holyoke St. Ry. Co. has completed surveys for its electric railway from Willimansett to Chicopee Center, and has obtained a franchise. The material will be purchased soon and the track-laying will be done by the company. The road will be 3¼ miles long. Pres., Wm. S. Loomis.

NORWOOD, MASS.—The Norfolk Southern St. R. R. Co. has obtained franchises and rights of way in this town and in Walpole, Foxboro and Mansfield, and the work of construction will begin at once. The road will be 17 miles long and will be operated by electricity. Treas., E. F. Draper, Exchange Bldg., Boston.

SOUTHINGTON, MASS.—C. F. Hamlin is interested in a proposed electric railway to be called the Meriden, Southington & Compounce Electric R. R.

BATH, N. Y.—The Fall Brook R. R. Co. proposes to build a railway through the towns of Knoxville, Jasper, Woodhull and Troupsburg, if the citizens of these towns will subscribe for $22,000 in stock.

BUFFALO, N. Y.—A hearing was granted by the railroad commissioners, Sept. 10, relative to the opposition of the Buffalo, Bellevue & Lancaster R. R. to the construction of the proposed Buffalo & Depew Electric Ry., between these two latter cities. Herbert P. Bissell represents the projected road.

LITTLE FALLS, N. Y.—The council has granted a 50-year franchise to the Little Falls & Herkimer St. R. R. Co. to build an electric railway through the principal streets of the city. The road must be finished by the end of next year. Engr., E. T. E. Lansing.

MECHANICVILLE, N. Y.—Albert E. Powers, Lansingburg, has been granted a franchise to construct and operate an electric railway between this place and Waterford, connecting with the Mechanicville & Stillwater St. Ry. and the road through Cohoes, Waterford, Lansingburg and Troy.

NEW YORK, N. Y.—The railroad commission will, on Sept. 22, at the Chamber of Commerce, in this city, hear the applications of the Coxsackie & Greenville Traction Co., the Oak Hill Traction Co., the Middleburgh & Oak Hill Traction Co. and the Windham Traction Co., the incorporation of which companies was announced in these columns in our issue of Aug. 5. Wm. G. Raines is the chief promoter and director.

OSWEGO, N. Y.—Max B. Richardson is interested in the extension of the street railway in East First St. to the theatre.

PENN YAN, N. Y.—The Penn Yan & Pennsylvania R. R. Co. has applied to the railroad commissioners for a franchise. J. D. Nares, Corning, may be addressed.

SENECA FALLS, N. Y.—The stockholders of the Geneva, Waterloo, Seneca Falls & Cayuga Lake Traction Co. will hold a meeting Oct. 1, to consider the proposition of leasing its line to the Auburn & Western R. R. In case of the consolidation taking place the road would be extended from Auburn to Cayuga Lake and Bridgeport.

SOUTH SCHENECTADY, N. Y.—A town meeting was held Sept. 8 to consider the advisability of extending the Schenectady St. Ry. to South Schenectady. A committee consisting of S. B. Robison, H. W. Veeder, R. J. Turnbull, Henry Springsted and Thos. Prentice was appointed to confer with the officials of the company and of the West Shore R. R. on Sept. 20.

TRENTON, N. J.—The Mulberry St. Passenger Ry. Co. has been incorporated with $12,500 capital stock to construct and operate a street railway in this city. The directors are: Henry C. Moore, Robt. S. Woodruff, Jonathan H. Blackwell, Ferd. W. Roebling, Peter E. Hurley, B. Frank Abbett and Levi T. Hannum.——The Pennington Ave. Passenger Ry. Co. has also been incorporated with the same amount of capital and by the same parties as the above, to construct and operate a street railway in this city.

JEDDO, PA.—Surveys have been completed by the Lehigh Traction Co. for an extension of its line to Eckley and Upper Lehigh.

VERONA, PA.—It is proposed to extend the Frankstown Ave. branch of the Consolidated Traction Co.'s line in Pittsburg, to this place. Arch. H. Rowland is said to be interested.

WAYNESBORO, PA.—The Blue Ridge Electric Ry. & Power Co. has been incorporated to construct electric railway lines over the Blue Ridge Mts., from this place to Blue Mountain, Mount Quirauk, Buena Vista and other mountain resorts. Capital stock, $200,000.

BALTIMORE, MD.—It is reported that the City Passenger Ry. Co. has decided to extend its line three miles beyond Lauraville, its present terminus. Pres., W. S. Franklin.

WATERLOO, S. C.—Edenfield & Lombard have the contract for constructing an electric railway from this place to Cross Hill, through Lithia Springs.

BIRMINGHAM, ALA.—The Birmingham Traction Co. has been incorporated with $50,000 capital stock. Geo. H. Clark, Cedartown, Ga., and John London, Birmingham, are among the incorporators.——The Birmingham Ry. & Electric Co. has begun work upon its proposed electric line on 11th St. Supt., H. McClary.——The Birmingham Powderly & Bessemer Ry. Co. has been granted a franchise to construct and operate its road over certain portions of Second and Third Aves., and of 17th St.

CLEVELAND, O.—The Cleveland, Berea & Elyria Electric Ry. Co. has withdrawn its application for a franchise to construct a spur over the Linndale road. F. C. Goodman, who asked for a similar franchise has been granted it. The proposed road will be called the Cleveland, Medina & Southern Electric Ry.

OXFORD, O.—Right of way has been secured from College Corner to this place for the Hamilton & Richmond Electric Ry. On account of the Cincinnati, Hamilton & Dayton Traction Co. changing its Hamilton terminal from B St. to Front St. the Hamilton & Richmond project has been waiting, as it is thought best to connect with the Cincinnati, Hamilton & Dayton so as to give electric connections to Cincinnati and Dayton. The matter will probably take definite shape before the close of present month.

SANDUSKY, O.—A syndicate composed of Boston and New York capitalists has completed arrangements for the purchase of the plant and franchise of the Sandusky Electric St. Ry. Co. and proposes organizing a stock company with a capital of at least $1,000,000 to construct in this section one of the largest systems of electric railways in the country. The proposed lines will pass through Norwalk, Monroeville, Bellevue, Fremont and Clyde to Toledo.

ALEXANDRIA, IND.—Congressman Henry has secured a franchise for an electric railway from Anderson, through this place, to Marion, Elwood and Muncie.

ANDERSON, IND.—The Union Traction Co. will construct an electric railway from this city to Marion, through Alexandria, Summitville, Fairmount, Jonesboro and Gas City. Pres., Philip Miller; Vice-Pres., J. A. Vansodal; Treas., John L. Forkner; Mgr., Chas. L. Henry.

PEKIN, ILL.—The Pekin, Tazewell & Peoria R. R. Co. has been incorporated to build an electric railway from Peoria to Pekin, on the Tazewell county side of the river. Capital stock, $150,000. Pres., C. W. Storer; Vice-Pres., S. L. Kilmer; Treas., J. B. Berteling; Secy., Lee H. Lord; Ch. Engr., Jacob A. Harman, Peoria.

PEORIA, ILL.—The Peoria & Pekin Traction Co. will have its line in operation early in the spring. The right of way has been obtained and construction will soon begin. Theo. J. Miller is interested.

ROCKFORD, ILL.—A. P. Lee, Gen. Agt., and E. J. Best, Engr., of the Interstate Ry. Co. are securing the right of way for an electric railway from Janesville, Wis. to this place.

EAST ST. LOUIS, ILL.—The East St. Louis Electric R. R. Co. has decided to enlarge its sheds and shops and hereafter all repairs and rebuilding of cars will be done here.

HOUSTON, TEX.—The contract has been let for the construction of the Galveston-Houston Electric Ry., which will be 50 miles long. Work will be completed April 1. A. B. Blevins may be addressed.

SAN PEDRO, CAL.—The Redondo Ry. Co. has about concluded arrangements to change the motive power of its road to electricity and will build a branch to this place, according to report. Gen. Mgr., Carnsey may be addressed.

HULL, ENGLAND.—Bids are asked until Nov. 5 by the city corporation for the electrical equipment of its tramways to the extent of about nine miles of double track and a half mile of single track. Specifications and plans will be ready for issue early in September, and may be obtained from the city engineer upon a deposit of £10, which will be refunded upon receipt of a bonafide tender and return of the plans and papers supplied. Checks to be made payable to Thos. G. Milner, Cy. Treas. A. E. White, Cy. Engr.; A. S. Barnard, Cy. Elec. Engr.

## ELECTRIC LIGHT AND POWER

BATH, ME.—Reports state that the Bath Iron Works will install an electric plant to furnish power for operating machinery and lights.

HARTFORD, CONN.—The entire plant of the Farmington River Power Co., at Poquonock, was destroyed by fire Sept. 6; loss, about $35,000; insurance, $34,000. Secy., E. C. Terry.

FREEPORT (L. I.), N. Y.—Joseph T. Weyant, Village Clk., writes us that the vote Sept. 7 was in favor of constructing an electric light plant, but that nothing further has been done as yet.

PALMYRA, N. Y.—The Palmyra Electric Light & Power Co. has issued $15,000 in preferred stock to meet the cost of proposed improvements.

PENN YAN, N. Y.—Russell & Birkett are said to be constructing a 40×80-ft. power house and will install a 300-HP. high pressure non-condensing engine, together with other machinery.

PROSPECT, N. Y.—Reports state that Carrol Upham, an electrical engineer, is preparing plans for the development of the water power here.

ROCKVILLE CENTRE (L. I.), N. Y.—At the election held Sept. 7 it was voted to issue $12,000 in bonds for constructing an electric light plant.

TRENTON, N. J.—Reports state that John A. Roebling's Sons Co. will erect a $2,000, two-story electric light station at the corner of Mott and Clinton Sts.

LANSDALE, PA.—The town clerk writes us that a vote will be taken at the general election in November upon the question of increasing the public debt for constructing an electric light plant.

CUMBERLAND, MD.—F. B. Rae, Chicago, Ill., is preparing plans for the proposed $20,000 electric light plant to be erected here.

WASHINGTON, D. C.—Reports state that the Potomac Electric Light & Power Co. has decided to issue $500,000 in bonds and will make extensive additions to its plant.

MONTGOMERY, W. VA.—The Montgomery Light & Water Co. has been incorporated with a capital stock of $200, privileged to increase same to $50,000. It is proposed to construct electric light and water-works plants. Alex. McNabb, J. H. Dunbar, Geo. Smith, Geo. W. Champe and A. D. Smith, Jr., are among the incorporators.

FAYETTEVILLE, N. C.—Our correspondent informs us that the Phoenix Cotton Mfg. Co. will probably install an electric light plant.

WHITEHALL, GA.—The Georgia Mfg. Co. of this place is said to be contemplating using electrical power to operate its machinery.

FERNANDINA, FLA.—This city is said to be contemplating extending its lighting system, and will install a new 150 HP. engine and boiler.

ATHENS, ALA.—An electric light plant is to be installed here, according to reports. The Mayor may be addressed.

CROWLEY, LA.—The council has awarded the contract for constructing an electric light and water-works plant to the Consolidated Engineering Co., Ltd., New Orleans, at $27,050, work to be completed within five months.

LUDLOW, KY.—This town is said to be considering the construction of an electric light plant.

MURRAY, KY.—Reports state that the Woodruff Lumber Co. is to install an electric light plant and will furnish the city with light. L. Y. Woodruff, Gen. Mgr.

CAREY, O.—Arbuckle & Ryan, Toledo, O., are said to have been awarded the contract for the engine; the Wood Electric Co., Fort Wayne, Ind., for the electrical machinery, and Herbert Hopkins, Toledo, for constructing the building for the proposed electric light plant.

MARION, IND.—The following bids were received Sept. 4 for constructing the proposed municipal electric light plant: John Watts, Cy. Clk.; William Link, Marion, Ind., $3,048; Patton & Thornburgh, Marion, $3,606; C. E. Tibbs, Marion, $3,475.

REMINGTON, IND.—The council is said to have granted George Fisher a 10-year franchise to construct and operate an electric light plant.

SOUTH WHITLEY, IND.—Reports state that a stock company has been formed here to put in an electric light plant.

ROMEO, MICH.—This town has voted to construct an electric light plant at an estimated cost of $13,000. Isaac Crawford, Ch. Com.

WYANDOTTE, MICH.—An election will be held Sept. 20 to vote on the question of issuing $5,000 in electric light plant bonds.

ST. ANNE, ILL.—A. C. Shripe informs us that the Pneumatic Air Pressure Co., Daniel W. Mead, Engr., Rockford, Ill., has been granted a franchise for the construction of water-works and an electric light plant; estimated cost, $12,000 to $15,000.

HENDERSON, MINN.—Bids are asked for constructing an electric light plant, including the building, generator, engine, boiler, etc. Camille Bisson, Cy. Clk.; W. J. Bonwell, Engr.; Newspaper Row, St. Paul, Minn.

HOWARD, S. DAK.—Reports state the construction of an electric light plant is being agitated.

COFFEYVILLE, KAN.—This town is about to construct a $17,000 electric light plant, according to reports.

LAGRANGE, MO.—An election will be held Oct. 19 to vote on the question of issuing $6,000 in bonds for constructing an electric light plant.

MARBLE FALLS, TEX.—The plant belonging to the ice, water and light company was destroyed by fire Aug. 30.

LEADVILLE, COLO.—Reports state that Col. R. E. Goodell and Dr. John Law are interested in the proposed construction of a storage reservoir on the Lake Fork branch of the Arkansas River, from which power can be obtained to operate an electric power plant. It is said that the syndicate has purchased 2,000 acres of land for this purpose.

AUBURN, CAL.—Bids are asked, according to reports, for lighting the streets.

FOREST HILL, CAL.—Reports state that the Forest Hill Electric Co. has been organized and will construct an electric light plant. E. K. Wilson and C. W. Langstaff are said to be interested.

RED BLUFF, CAL.—The council has ordered a survey made of the entire town for street work, sewer construction and possibly the construction of a municipal light and water-works plant.

HYRUM, UTAH.—The council has awarded a contract for constructing the proposed electric light plant to Christian Garff, according to reports.

QUEBEC, QUE.—The water power of the Shawenegan Falls is reported to have been sold Sept. 9 to David Russell, of Montreal, at $50,000. It is understood that a syndicate will erect a large power plant and manufacture calcium carbide for acetylene gas.

VERNON, B. C.—The council is said to have passed a resolution to construct electric light and water-works plants.

MEXICO, MEX.—Reports state that Francisco Espinosa, Treas.-Gen., has a concession from the government for utilizing for irrigation and motive power purposes the discharge of the Tequizouiac tunnel into the drainage works. The work that confronts the company first is the construction of the works at the falls for the conversion of the water power into electrical energy. Capital of company is $600,000. Pres., T. Braniff; V.-Pres., Jose Sanchez Ramos.

PORT ELIZABETH (CAPE COLONY), AFRICA.—Bids are asked for lighting the streets and municipal buildings with electricity in consideration of the grant of a concession for the exclusive right of supplying electric current through the streets and roads of the town to private houses, stores, etc., for terms of 5, 15, 20, 25 or 30 years respectively. There are, approximately, about 54 miles of streets in the town. The concession will provide inter alia that the particular system and plant to be adopted by the concessionaires shall be subject to the approval of the council; the chrge for supplying current to private houses shall not exceed 1s. 10d. per London board of trade unit, and that the council will have the option of taking over the whole undertaking, etc., at a valuation to be made in case of difference by two arbitrators or their umpire at the end of the period of the concession at the then value of the plant and mains. Tenders endorsed "Port Elizabeth Electric Lighting" should be delivered to the agents of the municipality, Messrs. Davis & Soper, No. 54 St. Mary-axe, London, E. C., from whom further information may be obtained on or before Sept. 21. S. Mandy, Acting Town Clk., Port Elizabeth.

NEW COMPANIES.—Yuba Electric Light, Power & Irrigation Co., Sacramento, Cal.; $140,000; J. Markley, H. Johnson, Frank Ryan, W. W. Bassett.

## BRIDGES

FRAMINGHAM, MASS.—The following bids were received Sept. 1 for constructing a steel girder bridge; Joseph C. Cloyes, Selectman:

| | |
|---|---|
| Edgemoor Bridge Works, Wilmington, Del | $3,067 |
| King Bridge, Co., Cleveland, O. | 2,690 |
| Pittsburg Bridge Co., Pittsburg, Pa. | 2,275 |
| Northeast Structural Co., Boston, Mass. | 3,459 |
| Groton Bridge & Mfg. Co., Groton, N. Y. | 2,900 |
| New Jersey Steel & Iron Co., Trenton, N. J. | 2,970 |
| Boston Bridge Works, Boston, Mass. (accepted) | 2,777 |
| Wrought Iron Bridge Co., Canton, O. | 2,545 |
| Dean & Westbrook, New York | 2,780 |
| Frank R. Long & Co., New York | 2,798 |
| Berlin Iron Bridge Co., East Berlin, Conn. | 3,000 |
| Youngstown Bridge Co., Youngstown, O. | 2,650 |
| Toledo Bridge Co., Toledo, O. | 3,200 |
| Mace Moulton, Springfield, Mass. | 3,225 |

FULTON, N. Y.—Bids are asked, according to reports, for constructing a bridge over the canal at First and Oneida Sts. George W. Aldrich, Supt. Pub. Wks., Albany.

HERKIMER, N. Y.—The Canton Bridge Co., Canton, O., has been awarded, at $850, a contract for constructing a 43-ft. truss bridge across the hydraulic canal at Falls St.

RAHWAY, N. J.—Reports state that a petition will be presented to the board of freeholders asking that the bridge at Bridge St. be rebuilt.

RIVERTON, N. J.—The Groton Bridge & Mfg. Co., Groton, N. Y., is said to have been awarded, Sept. 6, the contracts for constructing two iron bridges—one across Pompass Creek at $1,028, and one over Swede's Run at $857.

SOUTH BETHLEHEM, PA.—The following bids were received Sept. 3 for widening the stone bridge over Jacobus Creek, at Portland: Standard Construction Co., Easton, Pa. (accepted), $1,000; H. J. Scott, South Easton, $1,200; Keystone Construction Co., Easton, Pa., $1,164; H. Raesley, Upper Mount Bethel township, $2,495.

HAVRE DE GRACE, MD.—Wm. A. Pratt, Philadelphia, Bridge Engr., Philadelphia, Wilmington & Baltimore R.R., writes us that the Pencoyd Iron Works, Pencoyd, Pa., have been awarded the contract for constructing the proposed 181-ft. draw bridge between this town and Perryville, and will use the present foundations.

WASHINGTON, D. C.—Local papers state that the construction of a bridge at the foot of South Capitol St. is being considered by the district commissioners.

ROANOKE, VA.—Bids are asked until Sept. 27 for constructing a 110-ft. steel highway bridge, with a 16-ft. roadway, over Tinker Creek, at Richmond Ford. W. E. Thomas, Clk. Council; W. R. Coulbourn, Chn. St. Com.

MARTINSBURG, W. VA.—The Vulcan Road Machine Co., Charlestown, W. Va., has been awarded, at $5,225, a contract for constructing a bridge over Back Creek, near Hedgesville.

COLUMBUS, MISS.—The Youngstown Bridge Co., Youngstown, O., has been awarded, at $6,780, a contract for constructing a new pier under the bridge spanning the Tombigbee River at this place.

CHATTANOOGA, TENN.—Local papers state that a new steel bridge will be constructed over Lookout Creek, on the Wauhatchie Road. R. D. Betts, County Engr.

CINCINNATI, O.—Reports state that a new bridge is to be constructed over the Little Miami River at Remington. Frank S. King, County Engr.

CINCINNATI, O.—Local papers state that the bridge over the tracks of the Cleveland, Cincinnati, Chicago & St. Louis R. R., at Carr St., is in an unsafe condition and a new bridge is proposed. H. J. Stanley, Cy. Engr.

CLEVELAND, O.—Local papers state that Burnett & Schiffler submitted, at $8,634, the lowest bid for constructing the bridge at the crossing of the New York, Chicago & St. Louis R.R. at Rockfeller Park, and the Variety Iron Works Co. at $16,247, the lowest bid for constructing seven other bridges.

COLLINWOOD, O.—Reports state that plans have been prepared and submitted to the council for the proposed bridge across the railroad tracks at Collamer Ave. The plans provide for a 1,100-ft. bridge to be 26 ft. high in the center and 40 ft. wide, with roadways, sidewalks and street-car tracks.

YOUNGSTOWN, O.—Local papers state that the Youngstown Bridge Co. has been awarded, at $169,550, the contract for constructing the superstructure, and Niedermeier & Restle at $20,000 the contract for building the substructure for the Market St. bridge. The itemized bids were published in our issue of Sept. 2 and 9.

INDIANAPOLIS, IND.—Reports state that a new bridge is to be built over Pogue's Run, at Stoughton St., and that a new pier is to be put under the Indiana Ave. bridge, over Fall Creek. B. J. T. Jeup, Cy. Engr.

STILLWELL, IND.—Reports state that a new steel bridge is to be constructed at this place.

ALGONA, IA.—Bids are asked by the county supervisors until Sept. 20 for constructing a new 126-ft. iron bridge. F. D. Calkins, County Audr.

ANOKA, MINN.—Reports state that the county commissioners have accepted plans for a new steel arch bridge across Rum River, to have a 32-ft. roadway and two 8-ft. sidewalks.

JOHNS MILLS, MO.—The Wrought Iron Bridge Co., Canton, O., has been awarded, at $2,400, a contract for constructing a steel bridge over Sac River at this place, according to reports.

FARGO, N. DAK.—The Northern Pacific R. R. Co. is to build a new steel bridge across the Red River of the North at this place, according to report. W. L. Darling, Div. Engr., St. Paul, Minn.

TACOMA, WASH.—Local papers state that the Northern Pacific R. R. is replacing its wooden bridges between this city and the Stampede tunnel with steel structures.

OAKLAND, CAL.—The following bids were received Sept. 7, for constructing the Leon Creek culvert, near Mill's Seminary:

| | |
|---|---|
| W. J. Schmidt | $1,764 |
| Easton & Nilson | 1,945 |
| Bernard Hanson | 1,837 |
| E. B. Stone | 1,738 |
| Johnson & Peterson | 1,888 |
| Cotton Bros & Co. | 1,970 |

VENTURA, CAL.—Young Bros. are said to have been awarded, at $1,450, a contract for constructing a stone arch bridge at the Pinkerton crossing.

WEAVERVILLE, CAL.—The San Francisco Bridge Co. has been awarded, at $3,844, a contract for repairing the Junction City bridge, according to reports.

## BUILDINGS

BURLINGTON, VT.—Bids are asked until Oct. 7 for constructing three double stable guard buildings at Fort Ethan Allen. Capt. Guy Howard, Asst. Q. M.

EAST CAMBRIDGE, MASS.—Bids are asked by the commissioners of Middlesex county until Sept. 25 for the purchase of $100,000 in bonds for erecting the Lowell court house; also for the purchase of $90,000 in bonds for the new registry of deeds at Cambridge. Levi S. Gould, Chn. County Comrs., Court House, East Cambridge.

BUFFALO, N. Y.—Bids are asked for the construction of a wing for the Collins State Hospital, to cost about $65,000; for a boiler and engine house, to cost $40,000; for a water tower and reservoir, to cost $15,000, and for a laundry building, to cost $30,000. Arch., August C. Esenwein, 707 Mooney Bldg.——Bids are asked by the department of public works until Sept. 22 for erecting a brick addition to be used for lavatory purposes at school building No. 14, on Franklin, near Edward St.; for making sundry alterations at the north and south boiler houses and furnishing and putting in place 12 skylights on the roof of the north engine room at the lower pumping station at the foot of Massachusetts Ave., and for constructing a new roof, with skylights and sundry repairs at the Chippewa Market building. R. G. Parsons, Secy. Bd.——We are informed that bids will soon be asked for constructing a conservatory in South Park, to cost about $100,000.——Plans have been prepared for a 5-story brick flat building, to be erected for W. Larkin at 74 Day's Park, to cost $25,000. Archs., Pentecost, Byrens & Baggeley.

MOUNT VERNON, N. Y.—Dawson & Archer were the lowest bidders for constructing the new school building at High and Howard Sts., at $30,945.

NEW YORK, N. Y.—Bids are asked by the department of public parks, Arsenal, Central Park, until Sept. 27 for furnishing all the labor and materials necessary to erect and complete the new southwest corner wing and lecture hall building and enlargement of the American Museum of Natural History, in the Manhattan Square, including all the necessary blasting and excavating, blind and other drains, foundations, concreting, brickwork, rubble-stone work, cast iron, wrought iron and steel, galvanized iron and wirework, copper and other metal work, etc.——Plans are being prepared for the reconstruction of the R. E. Dietz building, at Greenwich and Laight Sts., which was damaged by fire; estimated cost, $60,000. Arch., Wm. J. Fryer, 19 Broadway.——John W. Ferguson, 253 Broadway, has been awarded the contract for erecting a 7-story brick, limestone and terra cotta warehouse, at Greenwich and Jane Sts., for Frank H. Gray; estimated cost, $125,000. Reports state that E. T. Richard, manager for J. W. Ferguson, will receive bids on subcontracts.——Plans have been filed by Jessie M. Converse, 8 East 67th St., for a 5-story brick, stone and terra cotta dwelling on 78th St., east of 5th Ave., to cost $100,000. Arch., C. P. H. Gilbert, 18 Broadway; by Wm. H. Weiher, Bedford Park, for four 4-story brick flat buildings on 147th St., east of Brook Ave., to cost $68,000. Arch., A. F. Koelble, 50 East 20th St.; by John MacGavock, 1238 Madison Ave., for four 4-story brick tenement buildings on St. Ann's Ave., near 156th St. Arch., Thomas Graham, 1236 Madison Ave.; by S. V. R. Cruger et al. for a 6-story brick warehouse, at Elm and Centre Sts., to cost about $80,000. Archs., Brazier & Simonson, 156 5th Ave.; by James Everard, 697 5th Ave., for four 5-story brick flat and store buildings, at 133d St. and 5th Ave., to cost $80,000. Arch., J. W. Cole, 430 West 51st St.; by Henry Holding, 350 Mott Ave., for a 4-story brick stable, 50 × 144 ft., on 53d St., east of 10th Ave., to cost $35,000. Archs., Kerby & Co., 722 Tremont Ave.; by Joseph T. Tower, Millbrook, N. Y., for a 12-story brick and stone mercantile building, at 5th Ave. and 45th St., to cost $100,000. Arch., Jas. B. Baker, 156 5th Ave.; by Puck Publishing Co., for a 9 and a 7-story brick factory at Houston and Mulberry Sts., to cost $275,000. Arch., Albert Wagner, 107 University Place; by Herman Stursburg, of Baden Baden, Germany, for ten 5-story brick tenement buildings at Brook Ave. and 138th and 139th Sts., to cost $140,000. Archs., Schickel & Ditmars, 111 5th Ave.; by George Sherman, 16 West 20th St., for a 4-story brick and stone dwelling on 55th St., west of 5th Ave., to cost $65,000. Arch., R. H. Robertson, 160 5th Ave.; by James Livingston, 8 West 94th St., for a 7-story brick flat building at 87th St. and Central Park West, to cost $175,000; by James Pohlstein and William Feinberg, 200 Henry St., for two 6-story brick flat buildings, at 13 and 15 Rutgers Place, to cost $48,000. Archs., Bernstein & Stone, 145 Centre St.——The following bids were received Sept. 9 for furnishing all the labor and materials required for a new library in the court room of the U. S. court house and post office building, as advertised in Engineering News. C. E. Kemper, Acting Supv. Arch., Washington, D. C.:

| | | Time. |
|---|---|---|
| Wm. F. Olding, New York | $14,990 | 3 mos. |
| Terry & Tench Construct on Co., New York | 13,437 | 90 days |
| George Telfer, New York | 17,596 | 3 mos. |
| Chicago Arch. Iron Wks., Chicago, Ill | 12,986 | 90 days |
| McArtney & Prisel, New York | 17,500 | 3 mos. |
| Thomas Dwyer, Temple Court, New York | 13,230 | 3 " |
| D. S. Hess & Co., New York | 11,475 | 3 " |
| Manhattan Supply Co., New York | 20,812 | 90 days |
| John F. Dalton, New York | 14,264 | 3 mos. |

NEW YORK, N. Y.—Plans have been filed by Cummings & Ferguson, 28 West 97th St., for five 5-story brick flat buildings on 103d St., east of Columbus Ave., to cost $132,000. Arch., G. F. Pelham, 503 5th Ave.——The following bids were received by the board of education at 585 Broadway, Sept. 13, for erection of new school building on easterly side of Andrews Ave. and northerly side of Burnside Ave., Morris Heights:

| | |
|---|---|
| James J. Loonie, 147 West 76th St. | $81,500 |
| John P. Johnson, 114 East 124th St. | 84,700 |
| T. Mahony & Son, 156 5th Ave. | 85,913 |
| Thomas Dwyer, Temple Court | 91,866 |
| John J. Hopper, 215 West 125th St. | 93,500 |
| Thos. Cockerill & Son, 550 West 41st St. | 94,500 |

ATLANTIC CITY, N. J.—A hotel building will be erected here for Mrs. K. Shuman, to cost about $43,000. Arch., Peter Kuhn, 2928 North 8th St., Philadelphia, Pa.

BLOOMFIELD, N. J.—Reports state that plans have been prepared for a new railway station, 126 × 23 ft., to be erected here for the Erie R. R., 21 Cortlandt St., New York; also that plans will be prepared for a passenger station at Montclair. Arch., Geo. E. Archer, 26 Cortlandt St., New York, N. Y.

CHESTER, PA.—Plans have been prepared, according to reports, for twenty-five brick dwelling houses to be erected here for W. L. Price; estimated cost, $225,000. Arch., Samuel Milligan, 520 Walnut St., Philadelphia.

PITTSBURG, PA.—A new market house, 200 × 290 ft., will soon be erected at South Highland and Center Aves., to be known as the "Liberty Market." The building will be equipped with its own water, electric light and steam-heating plants, besides a cold storage system with ammonia pipes running to every stall; estimated cost, $100,000. D. P. Black is interested.——Plans have been prepared for a 6-story brick, stone and terra cotta office building to be erected for John A. Murtland at Smithfield St. and 6th Ave., to cost $50,000. Archs., Alden & Harlow, Vandergrift Bldg.

POTTSVILLE, PA.—A 6-story brick and stone hotel will be erected here at a cost of $60,000. Arch., E. F. Bertolette, Heed Bldg., Philadelphia, Pa.

GEORGETOWN, DEL.—The people in this town are contemplating the erection of a new county jail to replace the present building at this place.

WASHINGTON, D. C.—The following bids were received Sept. 7 for removing the present cages and the two old wooden passenger elevator cars, and for replacing the same with new steel cages and two new metallic cars complete, in the north and south elevator shafts, and for removing and placing new doors for west elevator of the U. S. Treasury Department building in this city:

| | | Time. |
|---|---|---|
| Messinger & Fairall, Washington, D. C. | $2,580 | 60 days. |
| Morse, Williams & Co., Philadelphia, Pa. | 3,331 | 40 " |
| Otis Bros. & Co., New York, N. Y. | 3,450 | " |

WASHINGTON, D. C.—Bids are asked by the district commissioners until Sept. 16 for constructing an engine house for the fire department at Washington and Pierce Sts. Anacostia.

ALEXANDRIA, VA.—The Smith Fire-Proof Construction Co. has been incorporated in this city, with a capital stock of $100,000, for the erection of a fire-proof building, etc. The officers are Pres., B. F. Smith; Treas., F. J. Smith; Secy., Geo. G. Smith.

MORGANTOWN, W. VA.—Plans have been prepared for a new school building to cost $35,000. Arch., C. J. L. Peoples, Times Bldg., Pittsburg, Pa.

GREENSBORO, N. C.—Reports state that the erection of a new jail for Guilford county is contemplated. W. C. Boren, Chn. Bd. County Comrs., Pomona, N. C.

CHATTANOOGA, TENN.—Bids are asked until Sept. 17 for converting the building in the rear of the city hall into police headquarters, and the E St. fire hall into a city jail. Mayor, Geo. W. Ochs; Archs., Adams & Bearden.

CLEVELAND, O.—Press reports state that the general contract for erecting the new station for the Cleveland Terminal & Valley Ry. has been awarded to C. N. Griffin; estimated cost, $125,000.

YOUNGSTOWN, O.—The following bids were received Sept. 10 for the installation of a low pressure return circulation, steam heating and ventilating apparatus for the post-office building in this city; as advertised in Engineering News. C. E. Kemper, Acting Supv. Arch., Washington, D. C.:

| | | Time. |
|---|---|---|
| John F. Dalton, New York, N. Y. | $2,690 | 60 days. |
| Wm. W. Tobin, Syracuse, N. Y. | 2,617 | 50 " |
| Phil. Steam Heating Co., Philadelphia, Pa. | 2,693 | 60 " |
| Clevld. Stm. Ftg. & Sply. Co., Cleveland, O. | 2,595 | 50 " |
| Samuel I. Pope Co., Chicago, Ill. | 2,447 | 60 " |
| Sproul & McGurvin, Grand Rapids, Mich. | 2,423 | 60 " |
| Clafer & Becker, Cleveland, O. | 2,736 | 60 " |
| Pittsburg Heat'g Supply Co., Pittsburg, Pa. | 1,997 | 60 " |
| Borger Bro. & Co., Columbus, O. | 2,319 | 60 " |
| Scholl & Semple, Youngstown, O. | 2,365 | 60 " |
| Optenberg & Sonnerman, Sheboygan, Wis. | 2,378 | 100 " |

THREE RIVERS, MICH.—This town voted, Aug. 31, to issue $50,000 in bonds for a new court house, provided the county seat be moved there from Centerville.

CHICAGO, ILL.—The following contracts were awarded by L. E. McGann, Comr. Pub. Wks., Sept. 8, for work on the construction of the new cellhouse for juvenile offenders at the Bridewell: W. E. Frost Mfg. Co., for carpenter work, $5,999; Anthony Burke, mason work, $10,090; Universal Construction Co., iron work, $4,500; J. J. Barrett, plumbing work, $7,700; Kroschell Bros., steam heating, $4,782; Henne & Company, cut stone, $1,637.

DECORAH, IA.—W. O. Nordheim, Secy. Bd. Education, informs us that on Sept. 7 Peter Johnson, of Decorah, was awarded the contract for installing a steam heating plant in the school building, at $490. Pres., A. D. Thomas.

DARLINGTON, WIS.—Bids are asked until Sept. 24 for erecting a new school building. Archs., Orff & Guilbert, Minneapolis, Minn.; William Hooper, Clk. School Bd.

MILWAUKEE, WIS.—Bids are asked by the department of public works until Sept. 30 for erecting a high school building to cost about $90,000.

OMAHA, NEB.—Bids are asked until Sept. 18 for constructing the Liberal Arts building for the Trans-Mississippi and International Exposition. F. P. Kirkendall, Mgr. Grounds & Bldg. Dept.——Bids are asked by the superintendent of construction of Nebraska state building until Sept. 18 for all the materials necessary to construct the Nebraska state building to be erected on the exposition grounds. George W. Blake, Supt. Construction.

COLUMBIA FALLS, MONT.—Bids are asked until Sept. 24 for installing a hot air heating plant in the soldiers' home at this place. Address C. B. Miller, Secy., 6th and Warren Sts., Helena, Mont.

IOLA, KAN.—A new brick and stone court house will soon be erected here at a cost of $40,000. Arch., G. P. Washburn, Olathe, Kan.; Contractor, L. W. Divilbiss.

ENGENIE, ORE.—L. N. Roney, Aug. 28, was awarded the contract for building the foundation for the new court house at $8,700.

SAN FRANCISCO, CAL.—Plans have been completed for a new stone church building, 75 × 140 ft., to be erected in this city for the Holy Cross Church; estimated cost, $50,000. Pastor, J. F. McGinty; Archs., Cahill & Condon.

VERNON, B. C.—The council has passed ordinances providing for the erection of a new city hall and electric lights and water-works plants.

CARDIFF, WALES.—Plans are asked until Dec. 4 for a new town hall, law courts, etc., for which premiums of £500 ($2,500), £300 and £200 are offered respectively for the three best designs. Address W. Harpur, Town Hall, Cardiff.

## WATER-WORKS.

KINGFIELD, ME.—Chas. N. Taylor, C. E., Natick, Mass., has been engaged by the Kingfield Water Co. to prepare plans for the proposed works for this place. There will be required about five miles of pipe, a dam and a distributing reservoir. H. S. Wing and E. E. Jenkins may be addressed.

MILLVILLE, MASS.—The Millville Protective Club is said to be again considering the question of works. Chn., C. R. Day; Secy., Jno. Conway.

WESTFIELD, MASS.—It is stated that arrangements are about completed for beginning the construction of the proposed extension to the works for an increased supply from Munn's Brook, in Granville, to cost about $100,000. A reservoir will be built at the brook, and about a mile of pipe will be laid through rock. There will be required about 2,500 tons of 10 to 24-in. pipe, 35 tons special castings, etc. O. E. Parks, Town Engr.

MERIDEN, CONN.—C. W. Blakeslee & Sons, New Haven, Conn., have been awarded the contract for improving the spillway at the Kenmore reservoir, to cost about $10,000. Others who submitted bids Sept. 4 were the Aetna Construction Co., New York; C. R. Tryon & Son, Meriden, and Sexton & Coogan, Meriden.

NEW BRITAIN, CONN.—Bids are asked until Sept. 28 for the purchase of $100,000 of 4% 30-year water bonds. Thos. S. Hall, Chn. Water Com.

BATAVIA, N. Y.—Press reports state that the aldermen are considering the question of securing a pure water supply from springs on the farm of C. G. Dorman, a few miles from this city. Mayor Sanford and Alderman Moynihan may be addressed.

CASTLETON, N. Y.—The Castleton Water Supply Co. has been incorporated with a capital stock of $60,000 by Denis R. Fox, Edmund C. Lockwood, 128 Water St., New York; Willard F. Inman, Jas. W. Burr, 428 Central Park W., and others of New York.

CLEVELAND, N. Y.—The village trustees have voted in favor of water-works. W. T. Gray, Pres. United Glass Co., and H. T. Cookingham, of Utica, may be addressed.

MARATHON, N. Y.—James Monahan, of Sharon Springs, N. Y., has been awarded the contract for constructing works for this place, as advertised in Engineering News, at $10,718. The other bids submitted Sept. 2 were as follows; Engrs., Allen, Farrington & Co., Kirk Bldg., Syracuse, N. Y.:

| | |
|---|---|
| John J. Finigan, Lyons, N. Y. | $12,979 |
| Harter, Lewis & Co, Utica, N. Y. | 11,538 |
| John Marsden, Utica, N. Y. | 16,089 |
| Segretta & Co., New York | 20,250 |
| M. Birdseye, Fayette, N. Y. | 11,727 |
| Charles Smith, Syracuse, N. Y. | 15,587 |

MEXICO, N. Y.—Surveys are being made for a gravity system of works for this place. It is stated that a sufficient fall of water has not been secured.

OGDENSBURG, N. Y.—Bids are asked until Oct. 7 for furnishing and setting in place a 6,000,000-gallon pumping engine and one or two tubular steam boilers for the water-works. The contract for the building has been let to A. A. Paquette, as stated in our issue of last week. Supt., H. A. Lord; W. H. Daniels, Chn. Com.

PHILMONT, N. Y.—This place voted Aug. 25 to issue $11,000 in bonds for completing the construction of the works, according to reports. C. N. Harder, Pres. Water Comrs.

SAVANNAH, N. Y.—Bids will be asked at once by the water commissioners for constructing works, to cost about $12,000, according to reports.

SPRINGWATER, N. Y.—At an election held recently it was voted not to construct works at a cost of about $90,000, according to reports.

WURTSBORO, N. Y.—Bids are asked until Oct. 1 for the purchase of $7,000 of 4% 5 to 19-year water bonds; population, 500. The contract for the water-works will probably be let as soon as the bonds are sold. Chas. G. Bennett, Secy. Water Comrs.

JERSEY CITY, N. J.—Press reports state that the water commissioners have asked the expert engineers to include in the specifications for a water supply a clause asking for bids from filtration companies. Consult. Engrs., C. C. Vermeule, 203 Broadway, New York, and Garwood Ferris; F. Heintze, Chn. Comrs.

VAILSBURG, N. J.—Wm. Billington, Borough Clk., writes us that petitions are being circulated and signed by property-owners, asking the council to issue $16,500 in bonds for a water supply and $30,000 for a sewer system. After the petitions have been presented an election will be held to vote on the question. Engr., Fred. T. Crane, Orange, N. J.

MIFFLINBURG, PA.—At an election Aug. 7 it was voted to issue $30,000 in bonds for works, according to reports.

GREENSBURG, PA.—The Monessen Water Co. of Westmoreland county has been incorporated with a capital stock of $500 by Jas. M. Schoonmaker, Jos. H. Reed, Winfield B. Carson and Wm. H. Donner, of Pittsburg, Pa.

BALTIMORE, MD.—The following bids were received by A. Hooper, Mayor, Sept. 4 for constructing the new Mount Royal pumping station: J. J. Walsh & Son, $191,117, 300 days; Morrow Bros., $209,750, 600 days; Willis & McClellan, $186,388, 350 days; B. F. Bennett, $199,500; C. Shehan & Son, $212,950, $217,950, $218,750, $220,400, 450 days; John Waters, $199,187, 250 days; John Stack & Sons, $195,881, $201,131, $203,703, $201,971, 450 days; J. H. Smith, $188,750, 300 days; McClenanan & Bros., $204,700, 435 days, and E. D. Preston, $205,000, $196,720, $198,700, 350 days. As the estimated cost was only $130,000, the bids were considered too high and were rejected. Henry Brauns, 1 W. Lexington St., Baltimore, has been directed to prepare modified plans, after which new bids will be asked. Ch. Engr., N. S. Hill, Jr.

RICHMOND, VA.—Bids are asked by the Transparent Ice Works until Oct. 20 for drilling an eight-inch well to a depth of about 500 ft. Mgr., T. A. Scott.

BENWOOD, W. VA.—Contractor James Kenney, of Bellaire, O., is reported to have been granted a 20-year franchise for water-works in this place.

FAIRMOUNT, W. VA.—Councilman Wm. S. Haymond, J. E. Morgan, Supt. Water-Wks., and Frank Cooper, Cy. Engr., have been investigating water-works and sewer systems in certain towns of this state and Pennsylvania with a view to securing data for the proposed systems, to cost about $30,000. It is said that the committee will recommend a supply to be secured from wells.

MONTGOMERY, W. VA.—The Montgomery Electric Light & Water Co. has been incorporated with a capital stock of $200, with privilege of increasing to $50,000. Incorporators, Alexander McNabb, J. H. Dunbar, Geo. Smith, Geo. W. Champe and A. D. Smith, Jr.

ELIZABETH CITY, N. C.—J. O. White, of Philadelphia, Pa., is said to have been awarded the contract by the town commissioners for furnishing this place with a water supply at $3,000 a year. It is said that about 75 fire plugs will be put in. The supply will probably be brought from the Pasquotank River, a distance of about 12 miles. Work will be begun at once.

GOLDSBORO, N. C.—A new local company has asked the council for permission to lay water mains on several streets. The Goldsboro Water-Works Co. now furnishes the town with water.

WILMINGTON, N. C.—Thompson & Storey, Wheeling, W. Va., has been awarded the contract by the Clarendon Water-Works Co. for sinking an 8-in. artesian well about 2,500 ft. at Hilton, for a new water supply. Supt., W. F. Robertson.

MOBILE, ALA.—The city officials are arranging for the construction of works and sewer system, to cost about $750,000, authorized Aug. 2. D. M. N. Ross, Cy. Engr.

MONTGOMERY, ALA.—The council committee has submitted a report of its conference with the Capital City Water Co. in regard to the purchase by the city of the plant. The company has offered to sell the plant for $475,000, while the city has offered but $395,175. The committee estimates that a city plant could be built for about $550,000. Fred Crosby is the receiver for the water company. Address Chairmin Deming, of the council water committee.

SENATOBIA, MISS.—Bids are asked until Oct. 1 for furnishing the material for works, to consist of about 13,000 ft. of 2 to 6-in. cast-iron pipe, a 40,000-gallon tank on a 60-ft. tower, a 200,000-gallon deep well pump, valves, hydrants, etc., as described in our advertising columns. Constructing Engrs., Sanders & Porter, Columbia Bldg., Louisville, Ky.; Mayor, J. W. Lauderdale.

SUMMIT, MISS.—J. B. Holden, Chn. Com., is asking for bids for supplies for works. Engrs., Alber & Byrne, 1821 Second Ave., Birmingham, Ala.; S. A. Matthews, Secy.

JACKSONVILLE FLA.—R. N. Ellis Supt. Water-Wks., informs us that the following bids were received Sept. 7 by B. F. Dillon, Chn. Bd. Trustees for water-works, for constructing a 450,000-gallon stand-pipe, 30 × 45 ft., and a tower 100 ft. high; as advertised in Engineering News:

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|---|---|
| Chicago Bridge & Iron Co., Chicago | $14,494 |
| Riter & Conley, Pittsburg, Pa | 14,128 |
| John Baizely, Philadelphia, Pa | 16,495 |
| Pippett & Wood, Phillipsburg, N. J. | 12,785 |
| Meehan Boiler & Construction Co., Lowellville, O. | 16,067 |
| Marietta Boiler Works, Marietta, O. | 14,910 |
| G. E. King Bridge Co., Des Moines, Ia. | 12,890 |
| The Gillett-Herzog Mfg., Minneapolis, Minn. | 10,773 |
| G. H. Crafts, Atlanta, Ga. | 11,638 |
| Geo. H. Crafts, Atlanta, Ga. | *12,900 |
| **R. D. Wood & Co., Philadelphia, Pa. | 10,948 |
| S. S. Leonard, Jacksonville, Fla | 13,245 |
| Penn. Bridge Co., Beaver Falls, Pa. | 10,900 |

*Tower on foundation complete.

**Awarded contract; contract for foundation awarded to W. A. Macduff, of Jacksonville, at $1,275.

CROWLEY, LA.—The Consolidated Engineering Co., New Orleans, La., is reported to have been awarded, Sept. 4, the contract for constructing water-works and an electric light plant, at $27,950. J. A. Holmboe, Louisville, Ky., and Sanders & Porter, Louisville, also submitted bids. P. T. Chappius, Mayor; Engr., O. H. Landreth, Schenectady, N. Y.

PADUCAH, KY.—Bids are asked at once by the Paducah Water Co. for furnishing a 4,000,000-gallon vertical compound pumping engine, as stated in our advertising columns. Supt., Muscoe Burnett; Ch. Engr., F. H. Hotty, 429 Broadway, Paducah.

CUYAHOGA FALLS, O.—The secretary of the board of water trustees writes us that the council has issued $60,000 in bonds of the $70,000 voted for water-works. The county auditor has been enjoined from putting a levy on duplicate. Preliminary estimates have been made by Geo. Paul. A consulting engineer will be employed to perfect plans, after the town is free of the injunction.

FOSTORIA, O.—J. A. Bradner, Supt. Water-Works, is said to have completed plans for a new dam at the water-works reservoir. Pres. Comrs., J. T. Hall.

MINGO JUNCTION, O.—The "Advocate" has secured estimates for constructing works to cost from $12,750 to about $27,000. R. A. Bryant, Secy. Bd. Trade, may be addressed.

CHICAGO, ILL.—The Lake Erie Engineering Co., Buffalo, N. Y., has been awarded the contract for furnishing a 14,000,000-gallon pumping engine at $32,650.

DUQUOIN, ILL.—It is reported that Blakeslee Bros. began the construction of their proposed water-works here Sept. 10. A 25-year franchise was granted Messrs. Blakeslee last June, as noted in our issue of June 24.

ST. ANNE, ILL.—A. C. Schriepe writes us that a franchise has been granted to the Pneumatic Air Pressure Co. for water-works and an electric light plant to cost about $15,000. There will be required 10 hydrants, one public fountain and over a mile of mains. The contract is to be closed within 30 days. Des. Engr., Daniel W. Mead, Rockford, Ill.

MINERAL POINT, WIS.—At the recent election the citizens voted to construct works to cost about $40,000. H. S. Weil, Cy. Clk.

MOUNT VERNON, IA.—It is stated that the question of constructing works is being considered.

SLEEPYEYE, MINN.—Fairbanks, Morse & Co., St. Paul, Minn., are reported to have been awarded the contract Sept. 6 for constructing works at $5,900. B. N. Larrabee, Recdr.

TOPEKA, KAN.—The Metropolitan Water Supply Co. has been incorporated with a capital stock of $500,000 by T. J. Anderson, W. W. Manspeaker, D. R. Hill and A. B. Quinton, all of Topeka.

FORT ROBINSON, NEB.—Bids are asked until Sept. 27 for constructing a 50,000-gallon steel water tank, with trestle. J. M. Marshall, Ch. Q. M., U. S. A., Omaha, Neb.

PLATTSMOUTH, NEB.—It is stated that A. B. Hunt, Ch. Engr. Omaha Water Co., Omaha, Neb., is making estimates for improving the works of the Plattsmouth Water Co. Supt., T. H. Pollock.

FORT KEOGH, MONT.—Bids are asked until Oct. 6 for erecting a 30,000-gallon water tank. D. D. Wheeler, Ch. Q. M., St. Paul, Minn.

CARTHAGE, MO.—Wynkoop Kiersted, C. E., 58 Water-Works Bldg., Kansas City, Mo., writes us that Martin A. McNerney has been awarded the contract for building a 500,000-gallon masonry settling reservoir, at $4,449. The improvements at present in progress are confined to an improvement of the water supply owned by the Carthage Water Co. Receiver, H. C. Messenger.

ST. LOUIS, MO.—Bids are asked until Sept. 21 for furnishing and delivering at the city pipe yard about 4,100 tons of 8 to 36-in. cast-iron water pipe, 200 tons special castings, 177 to 36-in. stop valves, 150 fire plugs, etc., and also for laying about 32,000 ft. of 6 to 36-in. pipe, taking up 15,000 ft. of 6-in. pipe, setting 70 fire plugs, etc. Robt. E. McMath, Pres. Bd. Pub. Improvements; E. S. Foster, Secy.——The water department will soon let contracts for a 36-in. main from tower No. 2 to Clark Ave., to cost about $125,000. The down-town distributing mains will be remodeled at a cost of about $175,000. The specifications for completing the new tower at the Compton Hill reservoir at a cost of $100,000 will soon be let. Local papers state that the department will have on hand this season about $750,000 worth of work, but part of this is already contracted for. M. L. Holman, Water Comr.

ALVIN, TEX.—The question of putting in water mains for fire protection is being considered.

McKINNEY, TEX.—The council will soon be petitioned to construct works; population, 6,000. J. L. White, of the Collin County National Bank, may be addressed.

MARBLE FALLS, TEX.—Press reports state that the house and machinery belonging to the Marble Falls Ice, Light & Water Co. were destroyed by fire Aug. 30. The plant was built in 1894 at a cost of about $7,500. Pres., A. R. Johnson, Burnet, Tex.; Supt., R. E. Johnson, Marble Falls.

SHERMAN, TEX.—The council has been petitioned to extend the mains in several streets. Supt., Wm. Iolson.

GILLETT, COLO.—W. L. Cotton has been awarded the contract for constructing works and a reservoir to cost about $22,000. G. H. Atherton, Cy. Engr.

SPOKANE, WASH.—The city officials who have been considering the question of a better water supply have decided that it is not feasible to build another reservoir until a greater water supply can be obtained. Another main may be added at a cost of about $35,000. Oskar Huber, Cy. Engr.

REDBLUFF, CAL.—The trustees are reported to have ordered a survey for municipal works. Water is now supplied to the town by the Antelope Creek & Redbluff Water Co.

SACRAMENTO, CAL.—The town commissioners of Washington, Yolo county, have awarded the contract for constructing works to Stanley & Co., San Francisco, Cal., at $5,700. A 60,000-gallon tank will be built on a tower 64 ft. high.

YREKA, CAL.—Press reports state that Henry Scheld has sold the water-works in this place owned by him to Louis Scheld & Bros., at $10,000, who will at once begin a number of improvements, among which will be a reservoir.

LAYTON, UTAH.—Plans for a reservoir in Davis county for supplying this place with water are reported as to be completed by Sept. 18 for the Layton & Davis Reservoir Co.; estimated cost, $20,000.

SUMMERSIDE, N. S.—Prof. R. S. Lea is said to be making surveys and investigations for water-works, it being proposed to take the supply from Pickerings Brook. Chairman Hunt, of the water committee, may be addressed.

LEON, MEX.—A local company is reported as sinking a well for a water supply.

ZACATECAS, MEX.—Gov. Jesus Arechiga has awarded a contract to J. R. Robertson, of Monterey, Mex., the contract for constructing works and sewers to cost about $1,000,000. The Geo. D. Cook Investment Co., of Chicago, Ill., has taken the bonds at 6%.

## IRRIGATION.

FRESNO, CAL.—The Madera Canal & Irrigation Co. proposes to construct an irrigation system to reclaim about 1,000,000 acres of land in Kings, Fresno and Merced counties. Water will be secured from Lake Tulare. The system will also be used for power purposes, according to reports. Engr., I. Teilman, Fresno; Pres., C. M. Wells, Los Angeles, Cal.

GLENDORA, CAL.—It is stated that the Crystal Lake Irrigation & Power Co. proposes to increase its capital stock from $250,000 to $400,000.

SAN BERNARDINO, CAL.—The Chicala Reservoir & Irrigation Co. is reported to have completed plans and specifications for the proposed system to irrigating 100,000 acres of land in this vicinity. There will be seven reservoirs, with concrete and masonry dams about 150 ft. high and from 150 to 1,000 ft. long; estimated cost, $5,000,000.

PRESCOTT, ARIZ.—It is reported that the committee is arranging for constructing a storage dam on Potts Creek, to cost about $80,000. R. B. Burns, Ch. Engr. Santa Fe Pacific R. R. Co., Williams, Ariz., Chn. Com.

NEW COMPANIES.—Bend Colony Irrigation Co., Bend Colony, Tehama county, Cal.; $18,000, with $3,050 paid in; A. M. F. McCullough, Los Angeles; W. C. Brokaw, J. B. Rogers, Red Bluff, Cal.; F. Godbolt, Proberta, Cal.; B. F. Newby, Dixon, Cal.

The Loanoke Live Stock Co., Malvern, Ark.; $4,500; Pres., T. S. Gordon, of Columbus, Mo.; Treas., Guy B. Bordon; Secy., N. P. Richmond.

Eastern Colorado Reservoir & Irrigation Co., Weld and Morgan counties, Colo.; $250,000; James H. Holmes, William E. Scott, I. B. Porter, William A. Hill, William H. Clatworthy.

Delta Enterprise Ditch Co., Delta, Colo.; $12,800; George Jackson, Martin King, Millard Fairlamb, Pleasant Duvail, Lewis L. Bigelow, all of Delta.

Clear Creek Irrigation Co., Winslow, Ariz.; $100,000; Fred. M. French, G. A. Wolff, J. I. Krentz, E. Chandler, all of Winslow, Ariz.

## SEWERAGE.

NEWPORT, ME.—We are informed that C. N. Taylor, Natick, Mass., has been awarded the contract for constructing 1,600 ft. of pipe sewers in this place. F. Neshaw, Town Clk.

LAWRENCE, MASS.—The council has passed the ordinance authorizing an issuance of $30,000 in bonds for sewer over Mayor Junkins' veto. A. D. Marble, Cy. Engr.

BRIDGEPORT, CONN.—Bids are asked until Sept. 20 for constructing sewers in two streets. F. C. Mullins, Cy. Clk.

STAMFORD, CONN.—Bids are asked until Sept. 20 for furnishing and laying 1,571 ft. of 20-in. iron sewer pipe for a part of the outlet force main of the sewer system. W. B. Cochrane, Cy. Engr.; C. E. Rowell, Chn. Com.

NEW ROCHELLE, N. Y.—Bids are asked until Sept. 25 for constructing 1½ miles of sewers in section No. 12 of the sewer system; surety, $10,000. J. K. Wilkes, Engr. for Comrs., 280 Main St., New Rochelle; T. S. Drake, Secy. And also until the same date for the purchase of $55,000 of outlet sewer bonds.

ONEIDA, N. Y.—Geo. S. Miller, Rome, N. Y., is reported to have been awarded the contract for constructing about 2½ miles of sewers, at $14,684.

SYRACUSE, N. Y.—The board of health is discussing the question of additional sewers in certain districts of the city. Commissioner Smith may be addressed. R. N. Stuart, Cy. Engr.

NEWARK, N. J.—The board of works is considering the question of building a new sewer system in the greater part of the city, to cost about $1,000,000. There are now over 130 miles of sewers in the city. There is talk of soon engaging an expert to look into the matter. Ernest Adam, Cy. Engr., has already prepared preliminary maps and plans. Commissioners Stainsby, Hewson or Van Duyne may be addressed.

ALTOONA, PA.—Harvey Linton, Cy. Engr., informs us that Isaac Bender was awarded contracts, Sept. 3, for constructing 15 to 8-in. pipe sewers in six streets, at about $3,200; that Chas. B. Clark has the contract for constructing 24 to 12-in. pipe sewers in two streets, at $1,410, and that Orner & Shellenberger have the contract for 10 and 8-in. pipe sewers in two streets, at $880.

CARBONDALE, PA.—The council has been petitioned to construct sewers in 17th Ave. and Spring St. Walter Frick, Cy. Engr.

CRAFTON, PA.—Bids are asked until Sept. 21 for constructing 3,100 ft. of sewers. F. A. McDonald, Borough Engr., 811 Penn Bldg., Pittsburg; F. R. C. Perrin, Clk.

EBENSBURG, PA.—It is reported that this place has voted to issue $11,000 in bonds for a sewer system.

POTTSTOWN, PA.—Press reports state that arrangements are being made for the construction of the proposed new sewer system, to cost about $300,000. R. E. Shaner, Cy. Engr.

NORRISTOWN, PA.—The council has passed ordinances for constructing sewers in two streets. Isaac Taylor, Pres. Council; Chas. W. Wainwright, Burgess.

SEWICKLEY, PA.—Bids are asked until Sept. 20 for constructing a pipe sewer in Pine St. Engrs., Trimble & Miller, 430 Fourth St., Pittsburg, Pa.; Dr. S. J. Jennings, Chn. St. Com.

FORT WASHINGTON, MD.—Bids are asked until Oct. 2 for constructing a 6-in. sewer at this post, as stated in our advertising columns. Gordon G. Heiner, Q. M., Fort Washington.

FREDERICKSBURG, VA.—The question of issuing $15,000 in bonds for a sewer system is reported as being considered. E. D. Cole may be addressed.

FAIRMOUNT, W. VA.—A committee, composed of Judge William S. Haymond, a member of the council; J. E. Morgan, Supt. Water-Works, and Frank Cooper, Cy. Engr., has been sent out by the council to investigate the sewerage system and water supply of various West Virginia and Pennsylvania towns. It is proposed to construct a sewer system and water-works, to cost about $30,000.

GOLDSBORO, N. C.—The aldermen have voted to submit to the people at the next election the question of constructing a sewer system to cost about $25,000.

MOBILE, ALA.—Arrangements are being made by the city officials for the construction of a sewer system and for the purchase of the water-works, to cost about $750,000, recently voted. D. M. N. Ross, Cy. Engr.

CHILLICOTHE, O.—Bids are asked by the board of sewer commissioners until Oct. 4 for constructing 24 to 8-in. pipe sewers in three streets. H. M. Redd, Cy. Engr.; E. M. Wiedler, Clk. Bd.

CLEVELAND, O.—Bids are asked until Oct. 12 for the purchase of $222,000 of 4% sewer bonds. H. L. Rossiter, Cy. Audr.; C. W. Chase, Cy. Treas.

NEWARK, O.—The city clerk was directed Aug. 31 to ask for bids for constructing a 36-in. brick sewer in 8th St. Councilmen Ferguson, Downey and Kuhn may be addressed.

NORWOOD, O.—Jos. McClain is reported to have been awarded the contract for constructing sewers in District No. 2, South Norwood, at $26,101. Mayor Fitzpatrick and Councilman Wallace Davis may be addressed.

OXFORD, O.—James & Winterstein, of Hamilton, O., are reported as about to submit plans for the proposed sewer system.

DETROIT, MICH.—Bids are asked until Sept. 17 for constructing sewers in seven alleys. Jno. McVicar, Pres. Bd. Pub. Wks.

HIGHLAND PARK, MICH.—The question of extending the sewers of Detroit to this place, at a cost of about $20,000, is being considered by the board of public works of Detroit and the town board of this place. F. B. Howard, Village Engr.; A. F. Clause, Chn. Com.; W. H. Davidson, Village Pres.

CHICAGO, ILL.—F. E. Davidson, Supt. of Sewers, is said by local papers to have completed plans for the proposed new 95th St. sewer system to drain the territory adjacent to the Calumet River; estimated cost, about $900,000. L. E. McGann, Comr. Pub. Wks.

LAKE FOREST, ILL.—Bids are asked until Sept. 30 for furnishing materials and for constructing 11,250 ft. of 12 to 8-in. tile and 3,750 ft. of 6-in. iron pipe sewers, etc., as described in our advertising columns. Engrs., Alvord & Shields, 1140 The Rookery, Chicago.

SACRAMENTO, CAL.—The board of trustees has ordered an election to be held to vote on the question of issuing $120,000 in bonds for sewer construction. Wm. Mullenny, City Surv.

SANTA ANA, CAL.—Press reports state that the city trustees have approved plans for a sewer system, to cost about $15,000. A. H. Finlay, Cy. Engr.

NIAGARA FALLS, ONT.—Sewer bonds for $59,083 at 5% were sold Sept. 13 to James A. Meldrum, Toronto, Ont., only for $68,776 and accrued interest (about $5,000). Chas. H. Mitchell, Cy. Engr.

MILLTOWN, N. B.—H. M. Balkam, Calais, Me., is said to have been engaged to prepare plans for a sewer system for this place, work on which will be begun at once.

UXBRIDGE, ENGLAND.—Plans are asked by the district council until Oct. 30 for a sewer system and a sewage disposal plant. Address Chas. Woodbridge, 38 High St.

## STREETS AND ROADS.

SUDBURY, MASS.—The following bids were received Sept. 9 for constructing about 2,200 ft. of state highway in this town: A. J. Wellington, Boston (accepted), $3,042; William H. Mague, West Newton, Mass., $3,374; and John Sheehan & Co., Lynn, Mass., $4,186.

MIDDLETOWN, R. I.—Bids are asked until Sept. 20 for grading, stoning and improving six sections of public highway in this town, including 1,100 ft. of Paradise Ave., 600 ft. of Turner's Lane, 844 ft. of Green End Ave. and 1,100 ft. of West Main Road. Albert L. Chase, Town Clk.; Wm. H. Lawton, Jr., Engr., Fludder's Block, Newport, R. I.

BRISTOL, CONN.—Bids are asked by the board of selectmen until Sept. 18 for grading and macadamizing a section of Riverside Ave.; bond required, $1,000. Hobart A. Warner, First Selectman; Jas. H. McDonald, Chn. State Highway Com., Hartford, Conn.

EAST WINDSOR, CONN.—Bids are asked until Sept. 24 for grading and graveling a section of Broad Brooks Road. H. W. Allen, First Selectman.

BROOKLYN, N. Y.—Reports state that the Eastern Bermudez Asphalt Co. was the lower of two bidders for asphalt work on Gerry St., Throop Ave., Floyd St., Lewis Ave., Gienada Place, Albany Ave., Grand and Washington Aves.; the total bid being $113,505; the bid of Crawford & Co. for the same work was $118,977. Frederick Luck was the lowest bidder for macadamizing Ave. C., from Flatbush Ave. to Coney Island Ave., at $19,908.

BROOKLYN, N. Y.—Bids are asked until Sept. 21 for the repaving with asphalt of portions of Halsey, Madison and Quincy Sts.; total bond required, $9,250. Theo. B. Willis, Comr. Cy. Wks.

MOUNT VERNON, N. Y.—Bids are asked until Sept. 27 for regulating, curbing and macadamizing South Tenth Ave., between First and Fourth Sts., and North High St., from Mount Vernon Ave. to Howard St. Wm. N. Hoyt, Cy. Clk., 49 and 51 South Fourth Ave.

NEW YORK, N. Y.—Bids are asked until Sept. 21 for the regulating, grading, flagging the sidewalks, etc., on portions of Clinton, Trinity and La Fontaine Aves. and 170th St.; also for paving portions of Gerard Ave. and Home St. with granite block pavement. Louis F. Haffen, Comr. St. Impvt. of 23d and 24th Wards, 3d Ave. and 177th St.

SYRACUSE, N. Y.—The Columbia Construction Co. was the lowest bidder for paving West Willow St., from North Clinton to West Genesee St., at $4,134. J. C. Warwick was awarded the contract for grading Cathers Ave., at $3,410. J. H. Meagher, Comr. Pub. Wks.

CAMDEN, N. J.—Bids are asked by the committee on streets and highways until Sept. 24 for paving part of Ferry Ave. and Birch St., from Fourth to Main St., with Belgian blocks, and the intersection of Cartaret and Mickle Sts. with assorted rubble stone. Chn., Henry C. Sharp.

LODI, N. J.—Bids are asked until Sept. 27 for grading and macadamizing about 4½ miles of road, as stated in our advertising columns. Engrs., Foster & Foye, 11 Broadway, New York, N. Y.; R. H. Holmes, Borough Clk.

NEW BRUNSWICK, N. J.—Bids are asked until Sept. 24 for macadamizing College Ave.; bond required, $1,000. We are also informed that it is very probable that the road from New Brunswick to Cranbury will be macadamized in a short time.

CRAFTON, PA.—Bids are asked until Sept. 21 for the grading, curbing and brick paving of Darragh St. F. R. C. Perrin, Borough Clk.; F. A. McDonald, Borough Engr., Penn Bldg., Pittsburg, Pa.

CONSHOHOCKEN, PA.—Reports state that the council has passed an ordinance appropriating $7,000 for the grading and macadamizing of several of the borough streets. Mr. Ross is interested.

CORAOPOLIS, PA.—Bids are asked by the street committee until Sept. 18 for the grading and paving of a portion of Mill St.; deposit required, $200. Address W. M. Stanton, Pres. Council; Junius D. McCabe, Borough Engr., 314 4th Ave., Pittsburg, Pa.

PITTSBURG, PA.—Plans and profiles were submitted to the commissioners of Allegheny county Sept. 3 for three more improvements on the following county roads: the Evergreen Plank or Girty's Run Road, the Noblestown Pike and the White Oak Level Road, leading out of McKeesport. Bids will probably be asked for making the first-named improvement, which calls for about four miles of work, and is estimated to cost $55,285. The call for bids on the other two improvements will possibly be delayed because of a preliminary investigation. Fred. W. Patterson, County Road Engr., Court House Bldg., Pittsburg.

SEWICKLEY, PA.—Bids are asked until Sept. 18 for grading and macadamizing a portion of Grant St.; also for curbing, laying and repairing sidewalks, etc., in various parts of the borough. S. D. Jennings, Chn. Street Com.; Trimball & Miller, Engrs., 430 4th Ave., Pittsburg, Pa.

SHENANDOAH, PA.—Bids are asked until Sept. 20 for the paving of four squares with brick or stone. J. B. Boehm, Chn. St. Com., 125 North Main St.

BALTIMORE, MD.—Bids are asked until Sept. 20 for grading and paving 23½ St.; also until Sept. 21 for grading and paving a private alley between Robinson St. and East Ave. W. A. Hanaway, Cy. Engr.

HAGERSTOWN, MD.—Bids are asked until Sept. 21 for paving a portion of West Washington St. D. W. Reichard, Pres. Bd. St. Comrs.

LAKEWOOD, O.—Bids are asked until Sept. 25 for grading, curbing and extending the culverts in this hamlet. U. W. Hird, Clk. Bd. Trustees.

RALEIGH, N. C.—At an election held here Sept. 8th $50,000 of 5% bonds were voted to be used for street improvements. The city will at once operate a convenient stone quarry, for which purpose machinery has yet to be purchased. Address John C. Drewry, Chn. St. Com.

TUSCUMBIA, ALA.—Reports state that the following bidders were awarded the contracts for building pike roads in Colbert county: George L. Young, of Birmingham, and Tracy Abernathy, of Tuscambia, were awarded a $16,000 contract; A. D. Thompson, of Sheffield, awarded a $20,000 contract; L. A. Rorex, of Cherokee, Ala., awarded a $6,000 contract.

LEESBURG, FLA.—Bids are asked until Sept. 20 for building a clay road from Leesburg towards Emeralda, via Lisbon, for which there is an appropriation of $1,650. Address P. W. Butler for information.

CINCINNATI, O.—Herman Suer, Sept. 4, was awarded the contract for constructing the new Indian Hill Road, at $30,631, which is about $10,000 less than the county engineer's estimate. Frank S. King, County Engr.

ELMWOOD PLACE, O.—Bids are asked until Sept. 22 for furnishing the necessary labor and materials for the improvement of McGregor Ave., from Centre Hill St. to McGregor Ave. Harry G. Schaeffer, Village Clk.; I. H. Baumer, Village Engr., Fifth and Main Sts.

FINDLAY, O.—Bids are asked until Sept. 18 for constructing sidewalks on sundry streets. A. W. Ray, Clk. Bd. Impvts.

MARION, O.—Bids are asked until Sept. 17 for about 6,000 cu. yds. of excavating, 7,950 lin. ft. of curbing, 14,000 sq. yds. of macadamizing, etc., on Mount Vernon Ave. James I. Beatty, Cy. Clk.; J. W. Scott, Cy. Engr.

WARREN, O.—Bids are asked until Oct. 7 for furnishing all the material (except brick) and labor necessary in the construction of about 2,857 sq. yds. of brick paving on South Park Ave. Albert E. Andrews, Cy. Clk.; E. P. Dickey, Cy. Engr.

TOLEDO, O.—Bids are asked until Sept. 20 for grading 7th St., from Starr Ave., Greenwood Ave., and for paving the central 20 ft. of the same with cedar or brick. Lem. P. Harris, Cy. Clk.; Wm. G. Clark, Cy. Engr.

PENDLETON, IND.—The contract for paving State St. with brick has been awarded to C. H. Daniels, of Anderson, Ind. C. E. Franklin, Town Clk.

MASON CITY, IA.—Bids are asked until Sept. 22 for 9,500 sq. yds. of brick paving and 3,000 lin. ft. of curbing, as stated in our advertising columns. C. I. Dike, Cy. Engr.; W. P. Fitch, Cy. Clk.

SOUTH OMAHA, NEB.—Bids will be asked until about Sept. 21 for grading 25th St., from A to F Sts. Mr. Ensor, Mayor.

ST. LOUIS, MO.—Bids are asked until Sept. 24 for grading, curbing and paving in sundry streets and alleys in this city. Robt. E. McMath, Pres. Bd. Pub. Impvts.

STOCKTON, CAL.—The council has passed resolutions of intention ordering the macadamizing of Lindsay St., from American to Stanislaus; also portions of Vine, Stanislaus and Poplar Sts. T. B. Littleton, Street Supt.

## MANUFACTURING PLANTS.

TROY, N. Y.—John A Manning informs us that the mill destroyed by fire Sept. 2 was his building and not that of Manning & Paine. It is expected to rebuild the mill as soon as the insurance matters have been settled, but nothing has yet been done.

CAMDEN, N. J.—John S. Rogers & Co. have been awarded the contract for erecting a 5-story brick factory building for the Camden Curtain & Embroidery Co., of Camden; estimated cost, $25,000. Arch., Thos. Stephen, Masonic Temple, Camden.

HULMEVILLE, PA.—It is reported that Frederick Rumpf & Sons, of Philadelphia, will soon construct a woolen mill near this place, to cost $35,000. About 250 operatives will be employed, for the accommodation of whom cottages will be erected.

PHILADELPHIA, PA.—Bids are being received, according to reports, for erecting a factory building at Allegheny Ave. and 2d St., for Thomas Boggs, carpet manufacturer; estimated cost, $70,000. Contractors, William Steele & Son, 506 Walnut St.

PITTSBURG, PA.—Reports state that a new plant will soon be established in this city for the manufacture of an electric brake invented by E. B. Skinner, known as the Skinner-Dorland brake, and at present in use on the traction roads of Utah. A. E. Swan, of Ogden, Utah, and Frank L. Pushaw, of Boston, are said to be interested.

McKEESPORT, PA.—The manufacturing plant at Mendelssohn Park, near this city, containing the Mendelssohn piano works, the Barckhoff organ works and the Dickson & Wood brick works, was recently destroyed by fire; reported loss, $65,000.

FOREST CITY, N. C.—Our correspondent informs us that the Florence cotton mills contemplate the enlargement of its plant and the installation of new machinery. Mgr., S. B. Tanner.

DURHAM, N. C.—Julian S. Carr informs us that the report stating that a new cotton mill, to cost about $50,000, would be erected here at once was premature.

BENNETTSVILLE, S. C.—The Red Bluff Mills, of Marlboro, has been incorporated by Alexander McRae, J. H. Mallonee, T. J. Rogers and others to erect a cotton mill in Marlboro county; capital stock, $50,000.

ATHENS, GA.—Reports state that the Athens knitting mills will double the capacity of its plant, and that about forty new machines will be bought for the manufacture of a line of pure Saxony wool hosiery. Supt., Geo. T. Nutall.

PULASKI, TENN.—B. F. McGrew will build and equip a sash cord, rope and bag manufactory at this place, to begin operations Oct. 1. Machinery, etc., it is understood, is yet to be purchased.

CHICAGO, ILL.—The New York Biscuit Co. will enlarge its biscuit manufacturing plant in this city, so as to occupy the entire block at Randolph, Washington, Morgan and Carpenter Sts.; estimated cost, $250,000. Work to be finished by Jan. 1.

PORTLAND, ORE.—A company has been incorporated by W. Weinhard, E. C. Hockpeel and W. W. Boag, with a capital stock of $750,000, to make and refine beet sugar. It is expected to erect and operate a factory.

MEXICO, MEX.—Reports state that Henry Heuer, dealer in musical instruments, has petitioned this government for a concession to erect in this republic a piano and organ factory; the capital stock of the new company is to be $250,000.

BRAZIL.—Press reports from Akron, O., state that the Diamond Match Co. is making preparations to build a factory in Brazil which will supply the South American trade. Dr. Viera Sonto and J. M. Vasquez, representing the Brazilian government, are investigating the matter.

## GAS PLANTS.

BUFFALO, N. Y.—Local papers state that the consolidated gas interests of Buffalo, including the Buffalo Gaslight Co. and the Citizens' Mutual Gaslight Co., were sold Sept. 11 to the banking firm of Emerson, McMillan & Co., of New York. The price is said to have been $5,000,000.

NEW ALBANY, IND.—Reports state that a company composed of H. E. Jewett, John S. McDonald, J. K. Woodward, C. U. Schindler, J. H. Fawcett, I. G. Strunk and John W. Gaither, with a capital stock of $10,000, has been organized to prospect for gas near this town.

MILWAUKEE, WIS.—The Milwaukee Gas Co. is said to be contemplating extending its plant at an estimated cost of about $250,000. General Manager Cowderly may be addressed.

NEW COMPANIES.—Algoma Oil & Gas Co., Algoma, W. Va.; $5,500. Thomas W. Thomas, Wilkes Barre, Pa.

Wick Oil Co., Phillippi, W. Va., $500; A. G. Dayton, Fred. O. Blue, W. T. Ice et al.

## MISCELLANEOUS CONTRACTS.

RAILWAY CARS.—St. Petersburg, Russia.—Press reports state that the Russian government is about to purchase 70,000 railway cars of various designs.

FORTIFICATIONS.—Port Townsend, Wash.—It is reported that the U. S. Engineers will let the contract for constructing fortifications at Point Wilson about Nov. 1.

CASES, FIXTURES, ETC.—Pittsburg, Pa.—Bids are asked until Sept. 23 for furnishing and placing fixtures in the Herron Hill laboratory. E. M. Bigelow, Dir. Pub. Wks.

LEVEE WORK.—Memphis, Tenn.—The St. Francis levee board has awarded the contract for constructing 17 miles of levee south of Pecan Point, at a cost of about $77,788, according to reports.

DREDGING.—San Joaquin River, Cal.—Bids are asked until Oct. 6 for dredging in the San Joaquin River. Maj. C. E. L. B. Davis, U. S. Engr., 59 Flood Bldg., San Francisco.

DAM.—McAdenville, N. C.—The McAden Mfg. Co. will soon let a contract for building a stone dam across the south fork of the Catawba River, to replace the mill's present dam.

CHANNEL.—Buffalo, N. Y.—Bids are asked until Sept. 17 for excavating a channel in Cazenovia Creek, Cazenovia Park. G. H. Selkirk, Secy., Room 5, City and County Hall, Buffalo.

RECREATION PIER.—Brooklyn, N. Y.—C. F. Bond will begin at once the construction of the proposed recreation pier at North Second St., to cost $14,903. T. B. Willis, Comr. Cy. Wks.

LOCK.—Ottawa, Ont.—Bids are asked until Sept. 20 for constructing a guard lock at the upper entrance of the Soulanges Canal; check, $3,800. L. K. Jones, Secy. Dept. Rys. and Canals, Ottawa.

DOCK.—Waukegan, Ill.—Press reports state that the council will ask for bids at once for constructing a sheeted dock 567 ft. long. The harbor will be deepened from 14½ to about 22 ft. Mayor Pearce may be addressed.

REMOVING WRECK.—Urbanna Creek, Va.—Bids are asked until Oct. 2 for removing the wreck of the schooner "Kate Lawson" in Urbanna Creek, Va. Lt.-Col. Chas. J. Allen, U. S. Engr., No. 601 18th St., N. W., Washington, D. C.

STONE WALL.—New York, N. Y.—Bids are asked until Oct. 13 for constructing about 40 lin. ft. of stone retaining wall at Dyckman Cut, as stated in our advertising columns. Lt.-Col. Wm. Ludlow, U. S. Engrs., Army Bldg., Whitehall St., New York.

REMOVING BUILDINGS.—Brooklyn, N. Y.—Bids are asked until Sept. 21 for the purchase and removal of the buildings on the property bounded by South 6th St., Kent Ave., South 5th St. and the water front. A. D. Baird, Pres. New East River Bridge Comrs., 84 Broadway, Brooklyn.

MONUMENT.—St. Joseph, Mich.—Bids are asked until Oct. 7 for furnishing and erecting a fireman's monument to cost about $2,000. Jno. Lindt, Ch. Engr. Fire Dept.

LEVEE WORK.—Concordia, Miss.—Helgason Bros., of Natchez, Miss., are said to have been awarded the contract for improving the Delhi levees, from sections 1 to 10, in Concordia and Tensas parishes. This, with several smaller lettings, will include about 1,000,000 cu. yds.

DAM.—Newburg, N. Y.—Press reports state that W. R. Scofield has prepared plans for rebuilding the Melzingah reservoir, which was washed away last July 22, a description and illustrations of which were published in our issue of July 22. It is said that work will be begun at once.

CANAL AND HARBOR.—San Leandro, Cal.—San Francisco papers state that a company is to be incorporated to build a canal from San Francisco Bay to San Leandro Bay and San Leandro River. It will also improve San Leandro Bay. Col. Lyman Bridges, 3ngr., of the Oakland Bd. of Trade, may be addressed.

LEVEE WORK.—New Orleans, La.—The state board of engineers have asked for bids for the following levee work: Cash Point levee, in Bossier parish, 50,000 cu. yds.; Logie Lee, in Caddo parish, 75,000 cu. yds., and Chinango, in West Baton Rouge parish, 32,000 cu. yds. Arsene Perrilliat, Asst. State Engr., New Orleans.

STEEL PIER.—Atlantic City, N. J.—Press reports state that a steel pier will be erected at the foot of Virginia Ave., at a cost of about $400,000. The structure will extend about 2,000 ft. into the water from land a Philadelphia and local syndicate has purchased from Geo. M. Jackson. The report says that the pier will be built this year.

EXTENDING PIER HEAD LINES.—Brooklyn, N. Y.—A public hearing will be given to those interested in the matter of extending the pier head lines in the East River, Brooklyn, and in Gravesend Bay, L. I., as stated in our advertising columns. Col. H. M. Roberts, U. S. Engr., Pres. New York Harbor Line Bd., Room A 7, Army Bldg., Whitehall St., New York city.

STONE ABUTMENTS.—East Helena, Mont.—Bids are asked until Sept. 19 for constructing two stone abutments in Lewis and Clarke county. These will be walls of 43 ft. long, 9 ft. high and 4 ft. thick at bottom. Four feet of each wall be laid in Portland cement, and five feet of each will be mixed mortar of Portland cement and good lime. John W. Wade, County Surv., Helena.

WEIR DAM AND TAIL RACE.—Chicago, Ill.—Bids are asked until Nov. 10 for constructing a tail race and weir dam for the drainage channel at Lockport, as advertised in Engineering News from July 22 to Aug. 12; bond, for tail race, $60,000; weir dam, $15,000. The itemized bids for this work, opened Aug. 25, were published in our issue of Sept. 2. Thos. Kelly, Pres. Bd. Trustees, 1110 Security Bldg., Chicago.

LEVEE WORK.—Memphis, Tenn.—The directors of the St. Francis levee board has decided to begin work at once on what is now known as the first division of the new work, a stretch of levee 17 miles long, and running from Pecan Point to just below Chute No. 38. There will also be a new line built across the bend at Craighead Point and some necessary repair work done in Mississippi county on the old levee. John B. Driver, Pres. Levee Bd.

DAM AND RESERVOIR.—Leadville, Colo.—Press reports state as follows: Senator Poole, of Denver, has closed a deal in which he has purchased 2,000 acres of ground located about three miles below Leadville, at which point he and his company will build a dam and reservoir, making use of the waters of the Arkansas River for the purpose of generating electricity to be used as power for the smelters and mines, or any other purposes necessary.

PARK.—Chelsea, Mass.—The park commission is said to be only awaiting the approval of the plans for the proposed park system by the war department before beginning work. It is proposed to extend the sea wall along the Mystic River from the Chelsea north bridge to the old government wharf out into the river, a distance of 150 ft., and to fill in the new territory for a parkway along the Mystic. The distance is about 1,000 ft., and the width is sufficient to provide for two driveways (each 20 ft. wide) and a foot walk. Col. Geo. W. Moses, Chn. Comn.; Hermon W. Pratt, Mayor.

BREAKWATER PIERS.—Duluth, Minn.—Porter Bros., of Duluth, Minn., submitted the lowest bids received by Maj. C. B. Sears, U. S. Engr., for building two breakwater piers at Lake Superior entrance to the Portage Lake ship canals, Michigan, as advertised in Engineering News. The total bids were as follows; the itemized bids will be published next week:

| | Norway pine. | White pine. |
|---|---|---|
| Porter Bros., Duluth, Minn. | $280,953 | $288,639 |
| Lydon & Drews Co., Chicago, Ill. | 309,680 | 315,650 |
| L. P. & J. A. Smith Co., Cleveland, O. | 323,752 | 329,232 |
| McArthur Bros, Chicago, Ill. | 356,080 | 365,041 |
| Heldmaier & Neu, Chicago, Ill. | .. | 364,340 |
| Chicago Star Con. & Dredging Co. | 311,120 | 318,080 |
| Jos. J. Churchyard, Buffalo, N. Y. | 355,524 | 363,518 |
| Lipsett & Gregg, Sault Ste. Marie | 307,340 | 331,938 |
| I. V. Hoag, Jr., Pittsburg, Pa. | 389,080 | 389,080 |
| Powell & Mitchell, Marquette, Mich. | 328,706 | 335,286 |

CANAL WORK.—Albany, N. Y.—Press reports state that the following contracts have been let by Geo. W. Aldridge, Supt. Pub. Wks., Albany, for making improvements to the Erie Canal, as advertised in Engineering News; between Locks 29 and 30, Thomas H. Karr, of Troy, N. Y., $9,122; about seven miles from Lock 45 to the east line of Oneida county, J. V. Quackenbush, of Mohawk, $181,998; from Lock 19 to 20, Thos. H. Karr, of Troy, N. Y., $65,812; between Locks 24 and 25, Laver & Hagaman, of Rochester, $97,301; between Locks 25 and 27, Troy Public Works Co., of Utica, N. Y., $132,678; between Locks 40 and 41, Clinton Beckwith, of Herkimer, N. Y., $53,000; between Locks 41 and 42, J. V. Quackenbush, of Mohawk, N. Y., $59,290; between Locks 39 and 40, to Clinton Beckwith, of Herkimer, N. Y., $69,829; from a point 1,000 ft. west of Hurd's bridge, a distance of 8½ miles to the foot of the Lockport locks to the Furnaceville Iron Co., of Rochester, $165,800; from Shelby Basin bridge to within 1,000 ft. west of Hurd's bridge, a distance of six miles, Baker & Banker, of Gloversville, N. Y., $98,760; from 700 ft. west of Long's bridge to Shelby Basin bridge, 8½ miles, to Williams, McNaughton & Pabst, of Buffalo, N. Y., $184,095; from Brailey's bridge westerly to 700 ft. west of Long's bridge, six miles, to the Furnaceville Iron Co., of Rochester, $135,500; from Cooley's Basin bridge to a point 1,000 ft. east of the Hooley bridge, 6½ miles, the Furnaceville Iron Co., of Rochester, $110,100; from a point east of Norman's bridge to Cooley's Basin bridge, 6 miles, to the Furnaceville Iron Co., $87,000; from Rowe St. bridge, Rochester, to 600 ft. east of Norman's bridge, eight miles, Henry C. Allen & Co., of Syracuse, N. Y., $105,850; from head of lock 66 to Rowe St. bridge, Rochester, 4½ miles, Whitmore, Rauber & Vicinus, of Rochester, $159,695; from head of Lock 62 to head of Lock 66, 5 miles, Whitmore, Rauber & Vicinus, of Rochester, $88,595, and from a point 100 ft. west of new Boston Road bridge to a point 100 ft. west of Kirkville Road bridge, seven miles, E. H. Gaynor, Fayetteville, $147,582.

## CONTRACT PRICES.

SEWER.—Jersey City, N. J.—The following bids were recently received by the street and water board for constructing a sewer in Manhattan Ave.; all local bidders:

| Bidder. | 15-in. pipe sewer, 630 lin. ft. | Rock excavation, 200 cu. yds. | Lumbr, 2,000 ft. B.M. |
|---|---|---|---|
| John Hopkins | $2.25 | $0.01 | $0.01 |
| McArthur & Shaw | 2.00 | .01 | .01 |
| Bernard Gannon. | 1.70 | .01 | .01 |
| William Byrnes | 1.50 | .50 | .01 |
| Phillip Tumulty | 1.33 | 1.25 | .01 |
| J. F. Mullery | 1.30 | 2.50 | .01 |
| William Ormsby | 1.30 | .01 | .50 |
| Edward O'Neill | 1.22 | 1.50 | .01 |
| Sheridan & Shea Co. | 1.06 | 2.50 | .01 |
| M. R. Van Keuren | 1.04 | 2.44 | .14 |

REGULATING DAM.—Sudbury, Mass.—The following bids were received Aug. 31 by the Metropolitan Water Board, 3 Mount Vernon St., Boston, for constructing a regulating dam at reservoir No. 5 of the Metropolitan water-works, in the Sudbury department, as advertised in Engineering News; Ch. Engr., F. P. Stearns; Ch. Bd., H. H. Sprague; contract was awarded Holbrook, Cabot & Daly, Newton, Mass.:

PAVING.—Omaha, Neb.—The following bids were received by Andrew Rosewater, Chn. Bd. Pub. Wks., Sept. 3, for paving in 16th St.; all local bidders or company represented by local agents:

| Quantities. | Hugh Murphy.[1] | Grant Paving Co.[1] | Omaha B. & C. Co.[3] | Iowa Brick Co.[3] | Barber Asp. Pavg. Co. |
|---|---|---|---|---|---|
| Asphalt, 17,265 sq yds.: | | | | | |
| Class C, 5-year guarantee | $1.22 | $1.43¾ | ..... | ..... | $1.49 |
| " E, " " | 1.50 | 1.48¾ | ..... | ..... | ..... |
| Brick, 2,401 sq. yds.: | | | | | |
| Class C, 5-year guarantee | 1.10 | 1.18 | $1.09 | $1.055 | .90 |
| Stone, 9,666 sq. yds.: | | | | | |
| Class D, 1-year guarantee | 1.50 | 2.00 | 1.90 | ..... | ... |

[1]4¼ ins. of broken stone on old concrete base. [2]1½-in. binder. [3]2 ins. asphalt.

BELGIAN BLOCK PAVING.—Brooklyn, N. Y.—The following bids were received by Theo. B. Willis, Comr. Cy. Wks., Sept. 1, for Belgian block paving in Essex St., from Atlantic Ave. to Eastern Parkway: John Hanna, all grading, complete, $2,707; new curb, lin. ft., 68 cts.; Belgian block pavement, complete, sq. yd., $1.60; blue stone bridging, sq. ft., 80 cts.; John H. Leich, grading, complete, 24 cts.; new curb, 70 cts.; Belgium block pavement, complete, $1.30; blue stone bridging, 40 cts.; Thomas Murphy, grading, complete, $1,600; new curbing (straight), 75 cts.; new curb (curved), 95 cts.; Belgian block pavement, complete, $1.75; blue stone bridging, 75 cts.; Frederick Luck, grading, complete, $700; new curb, 77 cts.; Belgian block pavement, complete, $1.37; blue stone bridging, 37 cts.; M. J. Dady, grading, complete, $600; new curb, 65 cts.; Belgian block pavement, complete, $1.39; blue stone bridging, 50 cts.; Norton & Gorman, grading, complete, $598; new curb, 70 cts.; Belgian block pavement, complete, $1.57; blue stone bridging, 40 cts.

Bids Received Aug. 31 for Constructing a Masonry Dam for the Metropolitan Water-Works, Boston, Mass.

| Quantities. | | Holbrook, Cabot & Daly, Newton, Mass. | Bonfiglio Perini, Fayville, Mass. | Saucier & O'Brien, Boston. | Ross & Fowler, Boston, Mass. | G. M. Evans, Marlboro, Mass. | H. P. Nawn, Boston, Mass. | Moulton & O'Mahoney, Boston, Mass. | Cenedella Bros., Milford, | Cheney & Trumbull, Lawrence, Mass. | C.A. & C. E. Trumbull, Boston, |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Excavation | 500 cu. yds. | $0.45 | $0.65 | $0.90 | $0.32 | $0.45 | $0.35 | $0.50 | $1.00 | $0.60 | $1.50 |
| Rip-rap paving | 110 " " | 1.50 | 1.35 | 1.80 | 4.25 | 1.25 | 1.10 | 2.00 | 1.75 | 4.00 | 2.00 |
| Cement concrete masonry | 210 " " | 5.25 | 4.50 | 5.25 | 4.73 | 5.00 | 5.50 | 5.00 | 5.50 | 5.00 | 5.50 |
| Rubble stone msry and pvg | 270 " " | 5.00 | 4.40 | 4.75 | 4.50 | 6.00 | 5.00 | 5.50 | 5.40 | 5.75 | 6.00 |
| Split stone masry and pvg | 120 " " | 8.50 | 11.00 | 7.75 | 9.00 | 11.00 | 13.00 | 13.25 | 13.00 | 15.00 | 12.00 |
| Dimension stone masonry. | 30 " " | 20.00 | 23.00 | 22.00 | 24.50 | 20.00 | 30.00 | 32.00 | 30.00 | 22.00 | 22.00 |
| Total | | $4,463 | $4,617 | $4,623 | $4,651 | $4,953 | $5,261 | $5,555 | $5,766 | $5,803 | $5,845 |

MACADAM PAVING.—Jersey City, N. J.—The following bids were received last month by the street and water board for macadam paving in Mercer St.:

| Bidder. | Earth excavation, 200 cu. yds. | Macadam, 2,900 sq. yds. | Manhole reset. |
|---|---|---|---|
| Rehill & Edwards | $0.15 | $0.83 | $2.00 |
| M. R. Van Keuren | .15 | .53 | 2.00 |
| Henry Byrne | .15 | .45 | 2.00 |
| J. J. Harrington | .25 | .45 | 1.00 |

LAYING WATER PIPE.—Boston, Mass.—The Metropolitan Water Board, 3 Mount Vernon St., informs us that the following bids were received Aug. 31 for laying water pipe in a portion of section No. 24 of the Metropolitan water-works, in Newtown and Watertown, as advertised in Engineering News; the bid of S. W. Frescoln, Reading, Pa., was accepted; H. H. Sprague, Chn. Bd.; F. P. Stearns, Ch. Engr.:

BRICK SEWER.—Indianapolis, Ind.—H. C. Roney has been awarded the contract for constructing a 3-ft. brick sewer in Washington St., from National to Coleman Ave., at $1.25 a ft. The City Construction Co. was the next lowest bidder, at $1.45.

Bids Received by the Metropolitan Water Board, Boston, Mass., Aug. 31, for Laying Water Pipes in Section 24.

| Bidder. | Laying cast-iron pipes. 20-in., 11,500 lin.ft. | 14-in., 50 lin.ft.[3] | 6-in., 75 lin.ft.[1] | Excavation—Rock.—abv.g. 425 c.yds. | Rock bel. 10 c.yds. | Earth, grade. 50 c.yds. | Set'g air vlvs, 3 each. | Chambers for valves. 20-in., 4 each. | 16-in., 1. | Blow-offs,[2] 6 each. | Concrete masy 25 c.yds. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. W. Frescoln, Reading, Pa. | $0.59 | $0.50 | $0.45 | $2.45 | $3.00 | $0.65 | $5.00 | $44.00 | $44.00 | $34.00 | $5.50 | $8,524 |
| Donato Cuozzo, Wellesley Hills, Mass. | .625 | .50 | .25 | 3.00 | 4.00 | .50 | 3.00 | 40.00 | 25.00 | 25.00 | 5.00 | 9,040 |
| Saucier & O'Brien, Boston, Mass. | .635 | .50 | .50 | 2.60 | 3.50 | .75 | 3.00 | 42.00 | 30.00 | 30.00 | 6.00 | 9,080 |
| J. T. Langford, Boston, Mass. | .60 | .50 | .40 | 3.50 | 5.00 | .60 | 3.00 | 40.00 | 35.00 | 35.00 | 6.00 | 9,087 |
| R. B. Malone & E. McHale, Boston, Mass. | .64 | .75 | 1.00 | 3.50 | 6.00 | .75 | 5.00 | 30.00 | 30.00 | 25.00 | 5.00 | 9,510 |
| J. H. McKnight, Hyde Park, Mass. | .68 | .73 | .45 | 2.90 | 4.00 | .73 | 4.00 | 45.00 | 45.00 | 27.00 | 4.50 | 9,711 |
| Moore & Co., Boston, Mass. | .70 | .70 | .70 | 3.00 | 7.00 | 1.00 | 3.00 | 50.00 | 45.00 | 40.00 | 6.00 | 10,177 |
| The C. H. Eglee Co., Boston, Mass. | .77 | .75 | .50 | 3.00 | 4.00 | .75 | 3.00 | 40.00 | 40.00 | 40.00 | 6.00 | 10,882 |
| H. A. Hanscom & Co., W. Medford, Mass. | .75 | .75 | .75 | 4.00 | 5.00 | 1.00 | 3.00 | 60.00 | 40.00 | 40.00 | 5.50 | 11,185 |
| Bruno & Salamone, E. Boston, Mass. | .78 | .78 | .40 | 3.75 | 4.00 | .75 | 3.00 | 40.00 | 40.00 | 40.00 | 6.00 | 11,309 |
| C. A. & C. E. Trumbull, Boston, Mass. | .78 | .78 | .40 | 4.00 | 5.00 | 1.00 | 3.75 | 50.00 | 40.00 | 40.00 | 6.00 | 11,480 |
| E. W. Everson & Co., Boston, Mass. | .80 | .80 | .80 | 4.00 | 4.00 | 1.00 | 3.00 | 35.00 | 25.00 | 25.00 | 6.00 | 11,564 |
| D. F. O'Connell, Boston, Mass. | .82 | 1.00 | .75 | 3.25 | 6.00 | 1.00 | 3.00 | 65.00 | 65.00 | 40.00 | 5.00 | 11,727 |
| Mikele Russo, Boston, Mass. | .90 | .50 | .35 | 2.50 | 3.50 | .40 | 3.00 | 44.00 | 30.00 | 33.00 | 5.50 | 12,069 |
| The T. A. Gillespie Co., Pittsburg, Pa. | .95 | .75 | .35 | 3.00 | [illegible] | .75 | 3.00 | 50.00 | 35.00 | 50.00 | 5.00 | 13,000 |
| Aab & Co., Waltham, Mass. | .90 | .90 | .50 | 3.50 | 5.00 | 2.00 | 3.00 | 33.50 | 30.00 | 34.00 | 4.60 | 13,507 |

[1]For blow-offs and connections. [2]For blow-offs and air valves. [3]For connections.

ASPHALT PAVING.—Hamilton, Ont.—The Krause-Irwin Co. is reported to have been awarded the contract for changing the brick paving on Macnab St. to asphalt, at $2.08 a sq. yd.

LAYING WATER PIPE.—Boston, Mass.—The Metropolitan Water Board received the following bids Aug. 31 for laying water pipes for the Metropolitan water-works in Dorchester, Quincy and Milton, Mass., as advertised in Engineering News; contract awarded Saucier & O'Brien; Wm. N. Davenport, Secy. Bd., 3 Mount Vernon St., Boston:

DREDGING.—Pittsburg, Pa.—Maj. C. F. Powell, U. S. Engr., has awarded the contract for 12,000 cu. yds. of dredging in the Monongahela River to C. Jutte & Co., of Pittsburg, at 9½ cts. a cu. yd.

CURBING.—Newport, Ky.—The following bids were received by W. L. Glazier, Cy. Engr., Sept. 1, for placing a combined cement curb and gutter on Columbia St.: S. J. Osborn, Jr., & Co., 69 cts. a lin. ft.; Chas. Kuhl Artificial Stone Co., 68 cts.; Cincinnati Granitoid, 65 cts.; Van Zandt & Meeds, 61 cts.

Bids Received Aug. 31 by the Metropolitan Water Board, Boston, Mass., for Laying Water Mains in Section 21.

| Bidder. | Laying c.-i. pipe 24-in., 16,000 lin.ft. | 16-in,[1] 5 lin.ft. | 12-in., 5 lin.ft. | 6-in.[2] 50 lin.ft. | Excavation—Rock,—Grade Abve, 300 c.yds. | Rock Belw, 10 c.yds. | Earth Belw, 100 c.yds. | Set'g air vlve, 7 each. | Chambers—24-in., vlves, 6 each. | Blw-ofs and air valves, 12 each. | Concrete masy, 5 c.yds. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Saucier & O'Brien, Boston, Mass. | $0.68 | $0.68 | $0.68 | $0.50 | $2.40 | $3.50 | $0.70 | $3.00 | $42.00 | $30.00 | $6.50 | $12,402 |
| S. W. Frescoln, Reading, Pa. | .75 | .50 | .45 | .40 | 2.45 | 3.00 | .65 | 5.00 | 44.00 | 34.00 | 6.00 | 13,592 |
| Donato Cuozzo, Wellesley Hills, Mass. | .775 | .775 | .50 | .25 | 3.00 | 4.00 | .50 | 3.00 | 40.00 | 25.00 | 5.00 | 13,905 |
| J. H. McKnight, Hyde Park, Mass. | .86 | 1.40 | 1.40 | .40 | 3.25 | 4.00 | .73 | 4.00 | 50.00 | 34.00 | 5.00 | 15,643 |
| The C. H. Eglee Co., Boston, Mass. | .80 | .80 | .75 | .50 | 3.00 | 4.00 | .75 | 3.00 | 40.00 | 40.00 | 6.00 | 16,059 |
| T. H. & G. M. Bryne, Hyde Park, Mass. | .90 | .90 | .90 | .90 | 2.75 | 2.75 | .50 | 3.00 | 50.00 | 35.00 | 6.00 | 16,128 |
| D. F. O'Connell, Boston, Mass. | .89 | 1.00 | 1.00 | .50 | 3.00 | 6.00 | 1.00 | 5.00 | 65.00 | 40.00 | 5.00 | 16,265 |
| Moore & Co., Boston, Mass. | .90 | .90 | .90 | .90 | 3.00 | 7.00 | 1.00 | 3.00 | 55.00 | 40.00 | 6.00 | 16,385 |
| H. A. Hanscom & Co., W. Medford, Mass | .95 | 1.00 | 1.00 | 1.00 | 3.25 | 5.00 | 1.00 | 3.00 | 60.00 | 40.00 | 5.50 | 17,274 |
| Mikele Russo, Boston, Mass. | .99 | .50 | .50 | .35 | 2.50 | 3.50 | .40 | 3.00 | 44.00 | 33.00 | 5.50 | 17,396 |
| C. A. & C. E. Trumbull, Boston, Mass. | .985 | .985 | .985 | .40 | 3.00 | 6.00 | 1.00 | 3.75 | 35.00 | 40.00 | 5.50 | 17,594 |
| The T. A. Gillespie Co., Pittsburg, Pa. | 1.15 | 1.00 | 1.00 | .35 | 3.00 | 4.00 | .75 | 3.00 | 50.00 | 50.00 | 5.00 | 20,389 |

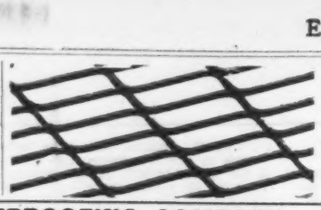
[1]For connections. [2]For blow-offs.

BRICK PAVING.—Mason City, Ia.—O. E. Stanley, Cy. Engr., writes us that the contract was awarded Sept. 4 to Frank McCann, of Fort Dodge, Ia., at $1.58 a sq. yd. for 9,500 sq. yds. of Des Moines repressed brick on 6 ins. of concrete, as advertised in Engineering News. The price includes taking out the old macadam to subgrade. Portland cement curb, 47 cts. a lin. ft.; resetting old curb, 12 cts. a lin. ft., and Kettle River sandstone curb, 51 cts. a lin. ft.

ASPHALT PAVING, ETC.—Brooklyn, N. Y.—The following bids were received by T. B. Willis, Comr. Cy. Wks., Sept. 1, for repaving Floyd St., from Marcy Ave. to Nostrand Ave., with asphalt: Fruin-Bambrick Construction Co., pavement complete, sq. yd. $1.24; new curb, lin. ft., 70 cts.; old curb, lin. ft., 35 cts.; concrete, cu. yd., $4.50; reflagging, sq. ft., 5 cts.; Brooklyn Alcatraz Asphalt Co., pavement complete, $1.10; new curb, 75 cts.; old curb, 30

**EXPANDED METAL.**

PITTSBURGH, 531 Wood Street.
NEW YORK, 256 Broadway.



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Powder, Dynamite, Rock Drills, Air Compressors, Rock Breakers, Safety Fuses, Electric Batteries, Miners' Squibs

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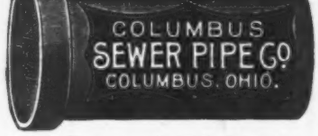


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**American Impulse Wheel Co.**

OF NEW YORK.

No. 120 Liberty Street.


WILLETS POINT, N. Y., Aug. 24, 1897.—Sealed proposals in triplicate for CONSTRUCTION, HEATING AND PLUMBING of a three-company MESS HALL AND KITCHEN will be received here until 12 o'clock, noon, Sept. 23, 1897, and then opened. U. S. reserves right to accept or reject any or all proposals, or any part thereof. Envelopes containing proposals to be endorsed "Proposals for ——— of mess hall." Information furnished on application to Lieut. E. W. VAN C. LUCAS, Q. M., Willets Point, N. Y. 34-4t

FORT BARRANCAS, FLA., Aug. 24, 1897.—Sealed proposals in triplicate will be received here till 12 m., Sept. 22, 1897, and then opened, for constructing a WHARF AND BOAT-HOUSE at this post. Government reserves right to accept or reject any or all bids or part thereof. Information furnished by M. F. HARMON, Lieut., Qr. Mr. 35-3t

## TO BRIDGE CONTRACTORS.

BRAINERD, MINN., Sept. 1, 1897.

Sealed proposals for the repair and reconstruction of the bridge over the Mississippi River at Laurel Street, Brainerd, will be received by the Board of County Commissioners at their office in the County Court House at Brainerd, until 10 o'clock a. m., of the 23d day of September, 1897, at which time they will be publicly opened and read.

The work will comprise two separate portions as follows:

1st. The superstructure complete, including three river piers.

2d. The substructure, excepting the three river piers, and comprising 28 piers and two abutments, all of stone and concrete.

Bids will be received for either one or both of the two portions as above. The right is reserved to accept any bid for either one or both of the portions as may be deemed for the best interests of the County; or, to reject any or all bids.

A properly certified check on some National Bank and made payable unconditionally, to the order of Joel Smith, Chairman, must accompany each bid, and be in an amount equal to Five Hundred Dollars ($500) for the first portion, and Three Hundred Dollars ($300) for the second portion, or Eight Hundred Dollars ($800) for both portions.

Proposals must be made upon blank forms furnished for that purpose and any not in conformity with this notice will be considered as informal and be rejected.

Plans and specifications are on file and can be seen, and blank forms of proposal obtained, after Sept. 13th, at the office of the County Auditor, and also C. F. LOWETH, Civil Engineer, 94 E. 4th St., St. Paul, Minn.

By order of the Board of Commissioners.

JOEL SMITH,
36-2t Chairman.

OFFICE CONSTRUCTING QUARTERMASTER, JEFFERSON BARRACKS, MO., August 25, 1897.—Sealed proposals will be received here, until 11 o'clock a. m., September 24, 1897, and then opened, for constructing at Jefferson Barracks, Mo., ONE COMMANDING OFFICER'S QUARTERS; also plumbing, heating, and gas piping same, according to plans and specifications to be seen here. Proposals and instructions to bidders furnished on application. Government reserves the right to reject any or all proposals, or any part thereof. JNO. T. KNIGHT, Capt. and Asst. Q. M., U. S. A. 34-4t

U. S. ENGINEER OFFICE, 601 18th St., N. W., Washington, D. C., August 25, 1897.—Sealed proposals for DREDGING AND ROCK EXCAVATION in Rappahannock River, Va., and DREDGING in Urbanna Creek, Va.; also for DREDGING in Mattaponi and Pamunkey rivers, Va., will be received here until 12 m., September 25, 1897, and then publicly opened. Information furnished on application. CHAS. J. ALLEN, Lieut.-Col., Engrs. 34-4t

**Other Proposals, Pages XXIV & XXVI.**

## CAST-IRON PIPE.

NEW BRITAIN, CONN.

Sealed proposals for furnishing about twelve miles of twenty-inch cast-iron water pipes and appurtenant special castings will be received by the City of New Britain, Conn., until twelve o'clock, Saturday noon, September 28, 1897. Specifications and form of proposal may be obtained at the office of the Board of Water Commissioners, 86 West Main St., New Britain, and all proposals must be formally made on blanks prepared therefor.

A certified check for Two Thousand Dollars ($2,000) must accompany proposal, and a bond acceptable to the Water Board, in the sum of Twenty Thousand Dollars ($20,000) will be required with the contract. The Board of Water Commissioners reserves the right to reject any or all proposals or to accept any proposal should the Board deem it for the interests of the City of New Britain so to do.

THOMAS S. HALL, Chairman,
P. J. EGAN,
H. D. HUMPHREY,
Board of Water Commissioners.
PERCY M. BLAKE,
Chief Engineer.

New Britain, Conn., September 6, 1897. 36-3t

## BRICK PAVING.

CORRY, PA.

Sealed bids will be received by the City of Corry, Pa., until 8 p. m., Wednesday, Sept. 22, for the paving of Centre Street with brick on gravel foundation, from Centre Alley to the south line of Pleasant Street; amount, about 2,030 square yards. The bids must be in duplicate, one addressed to City Controller and one to City Clerk; the one to City Clerk must be accompanied by a certificate of deposit, a certified check or cash in the sum of 300 dollars payable to the order of the City Treasurer.

Plans and specifications may be obtained at the office of the City Engineer.

GEO. D. GILBERT,
City Engineer.

Corry, Pa., Sept. 1, 1897. 36-2t

## PUMPING ENGINE.

Proposals will be received at once by the Paducah Water Co., of Paducah, Ky., for furnishing one 4,000,000-gal. Vertical Compound Pumping Engine.

PADUCAH WATER Co.,
37-1t MUSCOE BURNETT, Supt. and Treas.

## WATER-WORKS.

SENATOBIA, MISS.

Sealed proposals addressed to the Mayor and Board of Aldermen, Senatobia, Miss., will be received up to Oct. 1, 1897, for furnishing material for a system of water-works for Senatobia, Miss. Specifications can be seen at the Mayor's office, Senatobia, Miss.

J. W. LAUDERDALE, Mayor.
LUX McFADDEN, Clerk.
SANDERS & PORTER, Constructing Engrs., Louisville, Ky. 37-1t

WILLET'S POINT, N. Y., Sept. 4, 1897.—Sealed proposals, in triplicate, for REPAIRING QUARTERMASTER'S WHARF, will be received here until 12 o'clock noon, Sept. 21, 1897, and then opened. U. S. reserves right to accept or reject any or all proposals or any part thereof. Information furnished on application. Envelopes containing proposals to be indorsed "Proposal for repairing wharf," and addressed LT. LUCAS, Q. M. 36-2t

U. S. ENGINEER OFFICE, Montgomery, Ala., August 19, 1897.—Sealed proposals for furnishing and delivering CEMENT, BROKEN STONE, PEBBLES, FERTILE EARTH, STEEL I-BEAMS, STEEL BOLTS, TROLLEYS AND RAILS, PLUMBING SUPPLIES, BRONZE CASTINGS, AND ELECTRIC LIGHTING PLANT, at U. S. Engineer Wharf, Fort Pickens, Pensacola Harbor, Fla., will be received here until 12 m. (noon), September 22d, 1897, and then publicly opened. Information furnished on application to Lieut. J. P. JERVEY, Engineers, U. S. A., Warrington, Fla., or to F. A. MAHAN, Major Engrs. 34-4t

U. S. ENGINEER OFFICE, 1637 Indiana Ave., Chicago, Ill., August 23, 1897.—Sealed proposals, in triplicate, for constructing eight miles or less of Eastern Section of ILLINOIS AND MISSISSIPPI CANAL, from Mile 17 to Mile 24, west of Wyanet, Ill., for excavating LOCK PITS and constructing FOUNDATIONS FOR THREE LOCKS, and for constructing ONE CONCRETE ARCH CULVERT, will be received here until 12 noon, central time, September 23, 1897, and then publicly opened. Information furnished on application here, or to Assistant Engineer, JAMES C. LONG, Tiskilwa, Ill. W. L. MARSHALL, Major, Engrs. 34-4t


## FLORIDA AND THE SOUTH.

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## WATER-WORKS.

SOLDIERS GROVE, WIS.

The village of Soldiers Grove, Wis., will receive at the office of the Village President, until 8 o'clock p. m., on the 23d day of September, A. D., 1897, sealed proposals for the furnishing of all material and the doing of all work necessary to the completion of a system of water-works in the Village of Soldiers Grove, which shall conform to the specifications and accompanying plans. No proposal will be considered unless accompanied by a certified check on some responsible bank for the sum of two hundred and fifty dollars ($250) payable to the Village Treasurer, which shall serve as a good and sufficient guarantee that the bidder will, if awarded the contract, enter into such contract and furnish bond in the penal sum of three thousand ($3,000) dollars for the faithful performance of the contract to be entered into, otherwise to be forfeited to the Village of Soldiers Grove, Wisconsin. The Village Council reserves the right to reject any and all bids. Plans and specifications may be seen and all information obtained relative to the work at the office of the Village President, or at the office of Fairbanks, Morse & Co., corner Franklin and Monroe Streets, Chicago, Ill. 36-2t

## MAIN SEWER.

CLEVELAND, OHIO.

Bids will be received by the Secretary of the Board of Control of the City of Cleveland, Ohio, up till noon, October 1st, 1897, for constructing the third portion of Walworth Street main sewer.

The work consists of about 3,000 lineal feet of sewer, ranging from 13 ft. 6 ins. to 16 ft. 6 ins. interior diameter.

Bids must be made upon blanks furnished by the Chief Engineer, and accompanied by a certified check in the sum of Fifteen Thousand ($15,000.00) Dollars upon a solvent bank in the City of Cleveland.

Plans and specifications are on file and can be seen at the office of the Chief Engineer.

GEO. R. WARDEN,
Director of Public Works.
M. E. RAWSON,
Chief Engineer. 36-2t

## BRICK PAVING.

MASON CITY, IA.

Sealed proposals will be received by the Council of Mason City, at the office of the City Clerk of Mason City, Iowa, until 8 o'clock p. m., of the 22d day of September, 1897; at which time the same will be acted upon, for paving and curbing Main Street of said city, from the north end of the Willow Creek bridge to the north line of Seventh Street, about 9,500 square yards of paving and about 3,000 lineal feet of curbing.

The paving to be done with one course of vitrified paving bricks on six-inch concrete foundation, with sand cushion and sand and grout filler.

The curbing to be of the best Portland cement. Said work to be done according to the plans and specifications now on file in the office of the City Clerk, and to be commenced within ten (10) days from the completion of the contract for the same and to be finished on or before the 1st day of June, 1898.

Plans may be seen, specifications and blank proposals secured at the office of the City Clerk of Mason City, Iowa.

A certified check to the amount of $500.00, made payable to W. P. Fitch, or cash to that amount must accompany each bid.

The right is reserved to reject any and all bids.

W. P. FITCH,
37-1t City Clerk.

## MAIN SEWERS.

LAKE FORREST, ILL.

Bids will be received at the office of the City Clerk of Lake Forrest, Ill., up to 5 p. m., Sept. 30th, 1897, for furnishing the materials and labor and constructing the following approximate quantities of sewer:

2,800 feet of 12-inch tile sewer.
6,371 " " 10 " " "
2,200 " " 8 " " "
3,750 " " 6 " iron pipe sewer.
4 ordinary flushtanks.
1 special flushtank.
2 bridge crossings, including
250 feet of iron pipe.

Plans and specifications can be seen at the office of the City Clerk in Lake Forrest, Ill., or at the office of Alvord & Shields, Civil Engineers, The Rookery, Chicago.

All bids must be accompanied by a certified check for $500, as a guarantee of good faith, in the usual manner.

Payment for this work will be by warrant upon a special assessment when confirmed only.

The City Council reserve the right to reject any or all bids. 37-1t

cts.; concrete, $4.25; reflagging, 5 cts.; Cranford & Co., pavement complete, 95 cts.; new curb, 70 cts.; old curb, 30 cts.; concrete, $3.90; reflagging, 5 cts.; Eastern Bermudez Asphalt Paving Co., pavement complete, 80 cts.; new curb, 40 cts.; old curb, 30 cts.; concrete, $4; reflagging, 5 cts.

LUMBER.—Canton, O.—The following bids were received by L. E. Chapin, Cy. Engr., for furnishing hardwood lumber for a year:

| | Per 1,000 ft. |
|---|---|
| Wood & Brown, Peninsula, O. | $15.90 |
| P. J. Cannon, Columbus, O. | 16.50 |
| C. Galatin, Richville, O. | 14.49 |
| W. R. Henry, Canton, O. | 15.40 |

BRICK PAVING.—Duquesne, Pa.—S. A. Taylor, Consult. Engr., 82 Schmidt Bldg., 339 Fifth Ave., Pittsburg, Pa., sends us the following table of the bids received Aug. 19 for brick paving in Grant Ave.; contract awarded to Keeling & Ridge, Pittsburg, Pa.:

Bids Received at Duquesne, Pa., Aug. 19, for Brick Paving in Grant Ave.

| Quantities. | | Joseph Glanninie, Pittsburg, Pa. | Keeling & Ridge, Pittsburg, Pa. | Frankhouse & Coale, New Brighton, Pa. | John A. Lewis, West Elizabeth, Pa. | Speering, Bonar & Leader, Duquesne, Pa. | Bowman Bros., McKeesport, Pa. | Jno. D. Danlus, Bros., Braddock, Pa. | J. C. Speath, Pittsburg, Pa. |
|---|---|---|---|---|---|---|---|---|---|
| Excavation | 16,500 cu. yds. | $0.27 | $0.25 | $0.32 | $0.28 | $0.26 | $0.25 | $0.26 | $0.28 |
| Curb, dressed | 14,000 lin. ft. | .43 | .45 | .445 | .43 | .42 | .43 | .43 | .42 |
| Curb, rough | 500 " " | .28 | .35 | .30 | .34 | .30 | .35 | .30 | .35 |
| Paving brick | 25,000 sq. yds. | 1.04 | .85 | .925 | .91 | .92 | .95 | .90 | .92 |
| Ligonier block | 150 " " | ... | 1.55 | ... | ... | ... | ... | 1.20 | ... |
| Total | | $36,615 | $31,850 | $34,785 | $33,560 | $33,320 | $34,000 | $32,960 | $33,675 |

ASPHALT PAVING.—Brooklyn, N.Y.—The following bids were received Sept. 1 for repaving South Oxford St., from Fulton St. to DeKalb Ave., with asphalt pavement. Cranford & Co., asphalt pavement, complete, sq. yd., $1.10; new curb, lin. ft., 75 cts.; old curb, lin. ft., 35 cts.; repairing pavement, sq. yd., 30 cts.; reflagging, sq. ft., 5 cts.; Brooklyn Alcatraz Asphalt Co., for asphalt pavement, complete, $1.10; new curb, 75 cts.; old curb, 30 cts.; repairing pavement, 35 cts.; reflagging, 5 cts.; Eastern Bermudez Paving Co., for asphalt pavement, 95 cts.; new curb, 70 cts.; old curb, 30 cts.; repairing pavement, 30 cts.; reflagging, 5 cts. Theodore B. Willis, Comr. Cy. Wks.; R. M. Whiting, Secy.

WIRE AND POLES.—Washington, D. C.—S. I. Kimball, Gen. Supt. Life Saving Service, Washington, received the following bids Sept. 7 for furnishing about 6,660 lbs. of (1) copper wire and 350 (2) wooden telegraph poles:

| | Each. (1) | Each. (2) |
|---|---|---|
| McCay-Howard Engineering Co., Baltimore | $0.13 9-20 | .... |
| Wm. A. West, Portsmouth, Va | .... | $2.75 |
| James Clendenin, Baltimore, Md | .14 | ... |
| Estlow Bros., Barnegat, N. J | .... | 1.00 |
| M. Du Perow, Washington | .13¾ | 1.15 |
| American Electrical Wks, Providence, R. I. | .13⅝ | .... |
| Thompson C. Gill & Co., Philadelphia | .13 19-32 | 5.99 |
| Cavanagh Bros. & Knapp, New York | .16⅝ | 4.85 |
| Western Electric Co., New York | .13⅝ | 1.60 |
| Manhattan Supply Co., New York | .13 27-50 | 1.93 |
| F. H. Lovell & Co., New York | .12⅞ | 1.75 |
| Royce & Marean, Washington | .13⅝ | .... |

DREDGING.—Rock Island, Ill.—We are informed that the following bids were received by Lieut. Chas. Keller, U. S. Engr., Rock Island, for dredging and removing 30,000 cu. yds. of material in the Galena River, Ill., and towing 4½ miles or less, as advertised in Engineering News: Grant-Galena Co., Dubuque, Iowa, 24¾ cts. a cu. yd., $7,425; and H. S. Brown, Quincy, Ill., 26 cts., $7,80[illegible].

RIP-RAP STONE.—Tompkinsville (S. I.), N. Y.—It is reported that the following contracts have been let by the Third Lighthouse District for furnishing rip-rap stone for protecting light stations: S. & E. S. Belden, Hartford, Conn., $1.35 a ton delivered at Bullock Point Station; $1.13 a ton at Port Jefferson Station, and $1.13 a ton at Panfield Reef; Jno. Beattie, Leetes Island, Conn., $1.15 a ton delivered at Stratford Shoal Station; $1.18 a ton at Southwest Ledge, and $1.25 a ton at Lloyd Harbor Station; Daniel Crowley, Yonkers, N. Y., 84 cts. a ton at Old Orchard Shoal.

SEWERS.—Duquesne, Pa.—We are informed by S. A. Taylor, Consult. Engr., Pittsburg, that the following bids were received Aug. 19 for constructing sewers in Grant Ave.; contract awarded J. C. Speath, Pittsburg, Pa.:

Bids Received at Duquesne, Pa. Aug. 19, for Constructing Sewers in Grant Ave.

| Quantities. | | Joseph Glanninie, Pittsburg, Pa. | Keeling & Ridge, Pittsburg, Pa. | John A. Lewis, West Elizabeth, Pa. | S. H. Young, Duquesne, Pa. | Speering, Bonar & Leader, Duquesne, Pa. | Bowman Bros., McKeesport, Pa. | J. M. Dieterill, Pittsburg, Pa. | J. C. Speath, Pittsburg, Pa. |
|---|---|---|---|---|---|---|---|---|---|
| Manholes | 20 each | $32.00 | $25.00 | $28.00 | $35.00 | $30.00 | $30.00 | $28.00 | $28.00 |
| Lampholes | ..... | 25.00 | 5.00 | 5.00 | 4.50 | ... | 5.00 | 5.00 | 5.00 |
| Receiving basins | 45 each | 45.00 | 75.00 | 67.00 | 40.00 | 54.00 | 47.00 | 45.00 | 39.50 |
| Flushtank, No. 5 | 1 | 72.00 | 50.00 | 46.00 | 35.00 | ... | 47.00 | 30.00 | 50.00 |
| Double flushtank, No. 8 | 1 | 72.00 | 50.00 | 46.00 | 90.00 | ... | 47.00 | 30.00 | 50.00 |
| 36-in. terra cotta pipe | 125 ft. | 4.30 | 4.25 | 4.23 | 3.50 | 3.90 | 4.00 | 3.90 | 4.00 |
| 15-in. " " " | 500 " | .98 | .85 | .74 | .57 | .50 | .55 | .85 | .50 |
| 12-in. " " " | 1,750 " | .92 | .75 | .49 | .56 | .40 | .55 | .70 | .58 |
| 10-in. " " " | 1,200 " | .80 | .60 | .46 | 1.05 | .40 | .59 | .60 | .41 |
| 8-in. " " " | 1,400 " | .65 | .50 | .41 | .28 | .24 | .45 | .50 | .54 |
| 6-in. " " " | 6,570 " | .53 | .40 | .40 | .23 | .23 | ... | .28 | .34 |
| Lumber, per M. ft. B. M. | | 20.00 | ... | 18.00 | 12.00 | 12.00 | 14.00 | 15.00 | 20.00 |
| Total | | $10,857 | $10,343 | $9,222 | $7,524 | $6,825 | $5,918 | $8,093 | $7,765 |

COBBLESTONE PAVING.—Detroit, Mich.—Henry Meridian has been awarded the contract for cobblestone paving in several alleys, at 40 cts. a sq. yd.

CEMENT SIDEWALKS.—Indianapolis, Ind.—H. S. Nolting has been awarded the contract for laying a cement sidewalk, 4 ft. wide, on Dickson St., from Market to Ohio Sts., at 45 cts. a lin. ft.

BRICK PAVING.—Alton, Ill.—Nelch, Patterson & Strifler, Springfield, Ill., are reported to have been awarded the contract for 27,000 sq. yds. of brick paving in this city at 88 cts. a sq. yd.

GRADING.—Brooklyn, N. Y.—The following bids were received, Sept. 13, by T. B. Willis, Comr. Cy. Wks., for grading West 17th St., from Surf Ave. to Canal Ave.: Thomas P. Murphy, for all grading, complete, $21,775; each pile, $2.45; spruce plank, a 1,000 ft. B. M., $28; Michael J. Dady, grading, $14,675; piles, a lin. ft., 4½ cts.; spruce plank, a 1,000 ft. B. M., $25; Timothy E. Desmond, grading, $7,600; each pile $2.60; spruce plank, a 1,000 ft. B. M., $29.50; Thomas Gilbride, grading, $7,500; each pile, $4.80; spruce plank, a 1,000 ft. B. M., $21.60; John J. Curran, grading, $5,900; each pile, $2.25; spruce plank, a 1,000 ft. B. M., $27.

SEWERS.—Duquesne, Pa.—We are informed that S. H. Young, Duquesne, has been awarded the contract for constructing 850 ft. of 54-in. brick sewer in Duquesne Ave., at $380 a lin. ft., and that J. C. Speath, Pittsburg, Pa., has the contract for constructing pipe sewers in Duquesne Ave., at $9,027. The itemized bid for the pipe sewer is as follows: Manholes, 15, $28 each; lampholes, 4, $5 each; receiving basins, 22, $39.50 each; flushtank No. 5, $50; double flushtanks, No. 8, 2, $180; terra cotta pipe: 30-in., 1,075 ft., $2.49 a lin. ft.; 24-in., 940 ft., $1.35; 20-in., 800 ft., $1.25; 18-in., 550 ft., $1.06; 12-in., 500 ft., 58 cts.; 8-in., 1,065 ft., 54 cts.; 6-in., 2,500 ft., 34 cts.; lumber a M. ft., B.M., $20.

CULVERT.—Duquesne, Pa.—S. A. Taylor, Civil Engr., Pittsburg, awarded the following contract Aug. 19 for constructing a culvert in Duquesne Ave. to John H. Wertenbach, McKeesport, Pa.: Excavation, 30 cts. a cu. yd.; second-class masonry, $5.50; rubble masonry $3; brick masonry, $6.50; brick paving, $1; concrete, $5.

BRICK PAVING.—North Adams, Mass.—The department of public works, has awarded the contract for 1,600 sq. yds. of brick paving in Main St., to the New York Brick & Paving Co., Olean, N. Y., at $2.24 a sq. yd. for New York brick; Cone & Kenneady, of Dayton, O., submitted the only other bid.

## INDUSTRIAL NOTES.

THE BATH IRON WORKS, Lewiston, Me., expect to shortly operate all departments by electricity.

THE KANSAS CITY CAR & FOUNDRY CO.'S plant, at Kansas City, Mo., was recently destroyed by fire. The loss is about $150,000.

THE RIDGEWAY DYNAMO & ENGINE CO., Ridgeway, Pa., is reported to be busy with a considerable number of orders for engines and dynamos.

THE PULLMAN PALACE CAR CO., Pullman, Ill., is reported as earning $125,000 more during the past August than during the same month of 1896.

PUSEY & JONES CO., Wilmington, Del., will, according to report, be awarded the contract for a ferry boat to run from Governor's Island to New York.

THE PITTSBURG LOCOMOTIVE WORKS, Allegheny, Pa., was recently awarded the contract for five freight engines for the Chicago & Eastern Illinois R. R.

THE CARNEGIE STEEL CO., Pittsburg, Pa., is reported as receiving a contract from the Tennessee Central Ry. Co. for $400,000 worth of steel rails and fittings.

THE WARREN ELECTRIC & SPECIALTY CO., Warren, O., is reported as the lowest bidder for 10,000 incandescent lamps to be used in the new Chicago Public Library.

THE LAKE ERIE ENGINEERING WORKS, Buffalo, N. Y., is reported as the lowest bidder to supply a 30,000,000-gallon pump to the city of Chicago. Its bid was $83,875.

THE STILWELL-BIERCE & SMITH VAILE CO., Dayton, O., is reported to have orders ahead amounting to fully 125,000 HP. This is sufficient to keep the works busy for some time.

THE J. G. WHITE CO., New York, N. Y., is pushing the conduit construction for conveying power transmitted from the Falls from the city limits of Buffalo to the distributing point.

THE BALDWIN LOCOMOTIVE WORKS, Philadelphia, Pa., has at present a force of about 3,000 men at work. Reports state that they are receiving a large number of orders as a result of improving business prospects throughout the country.

THE STANDARD UNDERGROUND CABLE CO., Pittsburg, Pa., has opened an office in the Betz Building, Philadelphia, Pa. Mr. T. E. Hughes, who formerly managed the company's New York wire department, will have charge of the new office.

THE E. P. ALLIS CO., Milwaukee, Wis., is reported running day and night on the large number of foreign orders now on hand. These are principally from Australia, England and South Africa, and are nearly all engines or parts of engines.

THE STANDARD AIR BRAKE CO. has appointed Messrs. Dick, Kerr & Co., Ltd., 101 Leadenhall St., London, E. C., and Messrs. E. H. Cadiot & Co., 12 Rue St. Georges, Paris, as foreign agents and hopes to receive considerable foreign trade.

McGILL & CO., Pittsburg, Pa., according to report, are shipping considerable machinery abroad. A recent order from Mariopol, Russia, included about 110 tons of steel working machinery. Further shipments to local tube firms include about 15 tons of machinery.

THE MICHIGAN PENINSULA CAR CO., Detroit, Mich., will be reorganized. A meeting for that purpose will be held in Chicago early in October. The present company has a capital of $5,000,000 preferred and $3,000,000 common stock and a bonded indebtedness of $2,000,000.

THE BIRMINGHAM ROLLING MILL CO., Birmingham, Ala., is reported as operating a force of between 1,500 and 2,000 men. This is the largest number ever employed and every department is running to its utmost capacity with orders reported for months ahead. Some departments are even running day and night.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., has the contract for the new boiler house which the New York Belting & Packing Co. is putting up at Passaic, N. J. The building will be entirely fireproof, brick walls, with steel roof trusses covered with the Berlin Iron Bridge Co.'s patent anti-condensation corrugated iron covering.

THE TYLER TUBE & PIPE CO., Washington, Pa., has just finished the 60 tons of boiler tubes necessary for the Japanese battleship "Kasagi," which is in course of construction at Newport News, Va. The company also furnished the tubes for the battleships "Columbia," "Minneapolis," "New York," the ram "Katahdin" and other vessels. At present tubes for battleships Nos. 7 and 8 are being manufactured.

THE NATIONAL SWITCH & SIGNAL CO., Easton, Pa., has closed a contract with Mr. C. H. Ackert, Gen. Mgr. of the Elgin, Joliet & Eastern R. R. Co., for an interlocking plant near Hammond Crossing of the Elgin, Joliet & Eastern and the Chicago Terminal Transfer Co.'s tracks, consisting of 16 working levers for the operation of six derails and six facing point locks. No switch and lock movements will be used, and each facing point lock will be bolt-locked by the high signals.

THE WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., is reported to be very busy on its many large orders. Among those worthy of note may be mentioned the large incandescent dynamos (2,000-light), being built for the Allegheny County Light Co. These will be driven by 2,000-HP. Westinghouse direct-connected engines. It is also stated that they have been awarded a contract, amounting to from $350,000 to $400,000, for a large electric lighting plant to be installed in London. Tesla apparatus will be employed, it is understood.

JAMES BONAR & CO., Pittsburg, Pa., general sales agents for the Pittsburg feed-water heaters and puriners, have recently received orders for heaters from the following: Boggs & Buhl, Allegheny, Pa., 200 HP.; Hamilton Tin-Plate Co., West Newton, Pa., 500 HP.; National Tin Plate Co., Monessen, Pa., 1,500 HP.; Dennison Rolling Mill Co., Dennison, O., 600 HP.; Carey Electric Light Co., Carey, O., 150 HP.; Fremont Electric Light & Water-Works, Fremont, Mo., 150 HP. This company also reports doing a good business in its other steam appliances.

THE INGERSOLL-SERGEANT DRILL CO., Havemeyer Bldg., New York, N. Y., has just received an order from J. B. McDonald and Andrew Onderdonk, contractors of the Jerome Park Reservoir, N. Y., for a large air compressor plant, duplicating the plant which they now have, except that the plant ordered is larger and has both steam and air cylinders compounded. The present plant is capable of producing 540 HP. at a pressure of 80 lbs. in the receiver. It will be remembered that it will be necessary to excavate some 3,165,000 cu. yds. of solid rock for this reservoir.

### EXHIBITS AT THE ANNUAL MEETING OF THE NEW ENGLAND WATER-WORKS ASSOCIATION.

The following exhibits were shown at the annual convention of the association, at Newport, R. I., Sept. 8, 9 and 10, by the associate members named below. A few of the exhibits were models or pictures, only. The exhibit was in charge of Mr. Henry F. Jencks, of Pawtucket, R. I.

Meters.—Buffalo Meter Co., Buffalo, N. Y.; Builders Iron Foundry, Providence, R. I.; Hersey Mfg. Co., South Boston, Mass.; National Meter Co., New York; Neptune Meter Co., New York; Thomson Meter Co., Brooklyn, N. Y.; Union Water Meter Co., Worcester, Mass.; Henry R. Worthington, New York.

Pumps.—Deane Steam Pump Co., Holyoke, Mass.; Holly Mfg. Co., Lockport, N. Y.; Henry R. Worthington, New York.

Steam Pressure Gages and Engine Indicators.—Ashcroft Mfg. Co., New York; Ashton Valve Co., Boston, Mass.; Crosby Steam Gage & Valve Co., Boston, Mass. (gages only).

Valves and Hydrants.—Ashton Valve Co., Boston, Mass.; Builders Iron Foundry, Providence, R. I.; Coffin Valve Co., Boston, Mass.; Crosby Steam Gage & Valve Co., Boston, Mass.; A. S. Gear, New York; Kennedy Valve Mfg. Co., New York; Rensselaer Mfg. Co., Troy, N. Y.; Ross Valve Co., Troy, N. Y.; R. D. Wood & Co., Philadelphia, Pa.

Miscellaneous.—Drinking Fountains, Henry F. Jencks, Pawtucket, R. I.; Ejectors, Ashcroft Mfg. Co., New York; Indicator Post (to locate valves), Kennedy Valve Mfg. Co., New York; Lead and Tin-Lined Iron Pipe and Fittings, Lead-Lined Iron Pipe Co., Wakefield, Mass.; Pipe Cutting and Lead Removing Machines, Benj. C. Smith, New York; Pipe Plug, D. A. Streeter, Waterbury, Conn.; Pipe-Taping Machines, A. P. Smith Mfg. Co., Newark, N. J.; Revolution Counters, Crosby Steam Gage & Valve Co., Boston, Mass.; Service Boxes, Fall River Iron Works, Fall River, Mass.; Specials, Builders Iron Foundry, Providence, R.I.

NEW COMPANIES.—Nashwauk Iron Co., Jamestown, N. Y., incorporated in West Virginia; $300,000, commencing with $18,000; to operate a blast furnace; Frank E. Gifford, Cyrus E. Jones and Arthur C. Wade, of Jamestown.

International Homestead Co., Jersey City, N. J.; $50,000, commencing with $25,000; to reclaim and improve submerged lands, to build houses, wharves, etc.; Chas. S. McCoy and Leon A. Bell, Chicago, Ill.; Wm. H. Martin, Tampa, Fla.

THE CARROLL-PORTER BOILER & TANK CO., Pittsburg, Pa., is reported as the lowest bidder for supplying a 48-in. steel pipe for the Superior St. tunnel, Cleveland, O. The bid was $14,000.

THE CONSOLIDATED STEEL & WIRE CO., Joliet, Ill., will, according to report, start up its Enterprise wire mill, located at this place. It is expected to give employment to about 3,700 men.

THE CLEVELAND SHIP BUILDING CO., Lorain, O., will shortly begin work on what is considered the largest boat ever built on fresh water. The hull will be 450 ft. long, 50 ft. beam and 28½ ft. deep.

THE HARRISBURG FOUNDRY & MACHINE WORKS, Harrisburg, Pa., has, according to report, recently received an order for a pipe line at Boise City, Idaho, which will include over 200,000 lbs. of steel.

THE CLEVELAND MACHINE SCREW CO., Cleveland, O., which was recently sold to a French syndicate, will continue under the same management. J. D. Climo is secretary, and J. B. Clyne superintendent.

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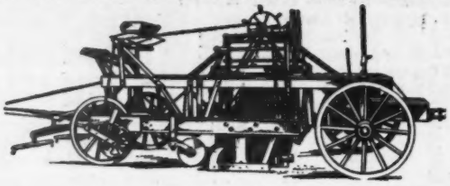

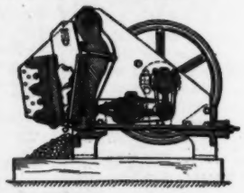

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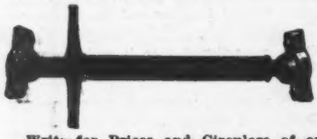

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OFFICE OF LIGHT-HOUSE, 9th District, Detroit, Mich., August 31, 1897.—Sealed proposals will be received at this office until 3 o'clock p. m., of Tuesday, the 21st day of September, 1897, for NORTH MANITOU LIGHT TOWER, Michigan. Plans, specifications, forms of proposal and other information may be obtained on application to this office. The right is reserved to reject any or all bids, and to waive any defects. M. B. ADAMS, Major, Corps of Engineers, U. S. A., Light-House Engineer. 36-2t

CONSTRUCTING Q. M. OFFICE, FORT HAMILTON, N. Y. H., Aug. 6, 1897.—Sealed proposals, in triplicate, will be received here until 11 o'clock a. m., Sept. 23, 1897, and then opened, for construction of ADMINISTRATION BUILDING, SHOPS AND STOREHOUSE, with necessary heating, gas-piping and plumbing. U. S. reserves the right to accept or reject any or all bids or any part thereof. Information furnished on application. Envelopes containing proposals should be marked "Proposals for Public Buildings at Fort Hamilton," and addressed CAPT. J. M. CARSON, Jr., A. Q. M. 34-4t

U. S. ENGINEER OFFICE, ARMY BUILDING, NEW YORK, Sept. 13, 1897.—Sealed proposals, in triplicate, for construction of about 40 LINEAR FEET STONE RETAINING WALL on north side of Dyckman Cut, west of Broadway, on line of Harlem River Improvement, will be received here until 12 m., Oct. 13, 1897, and then publicly opened. Information furnished on application. WILLIAM LUDLOW, Lt.-Col., Engrs. 37-4t

NOTICE.—PUBLIC HEARING.—There will be a public hearing by New York Harbor Line Board, 11 a. m., Sept. 28, 1897, in the matter of applications for EXTENSION OF PIERHEAD LINES in East River, N. Y., between Fulton and Hamilton Ferries in the City of Brooklyn; and between Canal and 22d Avenues, in Gravesent Bay, L. I. All persons interested are invited to be present and give their views. HENRY M. ROBERT, Col. Corps Engrs., President. 37-2t

CONSTRUCTION OF SEWER, FORT WASHINGTON, MD., Sept. 13th, 1897.—Sealed proposals, in triplicate, for constructing six-inch sewer at this post will be received here until 12 m., October 2, 1897, and then opened. Information furnished on application. U. S. reserves right to accept or reject any or all proposals. Envelopes containing proposals should be endorsed "Proposals for Construction of Sewer," and addressed GORDON G. HEINER, Q. M. 37-3t

### MACADAMIZING.

Lodi, N. J.

Sealed proposals will be received by the Mayor and Council of Lodi, N. J., until 8 p. m., Sept. 27, 1897, for grading and macadamizing about 4½ miles of streets. Specifications, etc., may be seen at office of the Borough Clerk or the Engineers, Foster & Foye, 11 Broadway, New York city. Certified check, $250, required with each bid. Right reserved to reject any and all bids.

R. H. HOLMES,
Borough Clerk.
37-1t

### A New Through Passenger Route for Colorado, Utah and California.

The Chicago "Times-Herald" of August 27th says that on September 12 the new traffic alliance between Chicago, Milwaukee & St. Paul Railway and the Chicago, Rock Island & Pacific Railway goes into effect, and on that date the former will send its first Denver sleeper out of Chicago. This will be attached to its regular night train for Omaha, and will be delivered there to the Rock Island. On October 2 the tourist car route over these two lines, the Colorado Midland and Southern Pacific will be inauguarted. Tourist cars will be run once a week between Chicago and San Francisco. For further details regarding this new route call on or address Geo. H. Heafford, General Passenger and Ticket Agent, C., M. & St. P. Ry., 410 Old Colony Building, Chicago, Ill.


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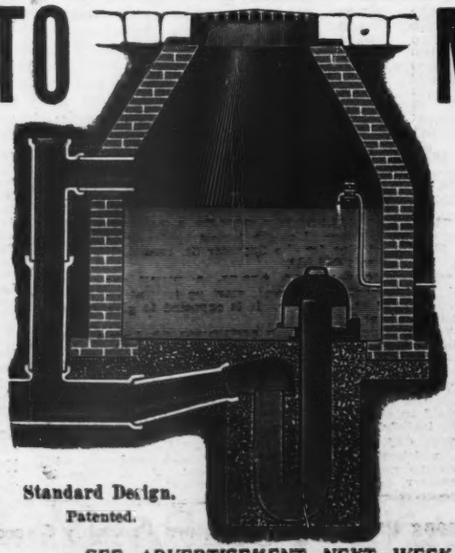

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